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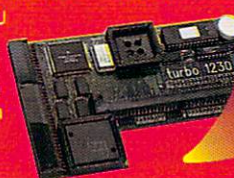
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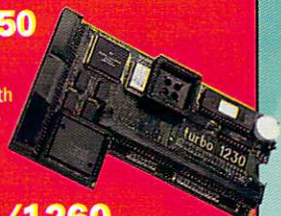
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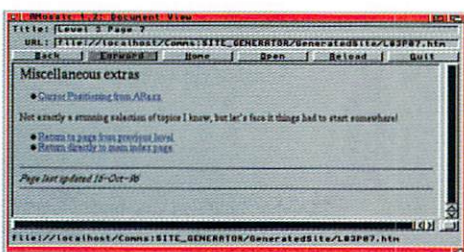
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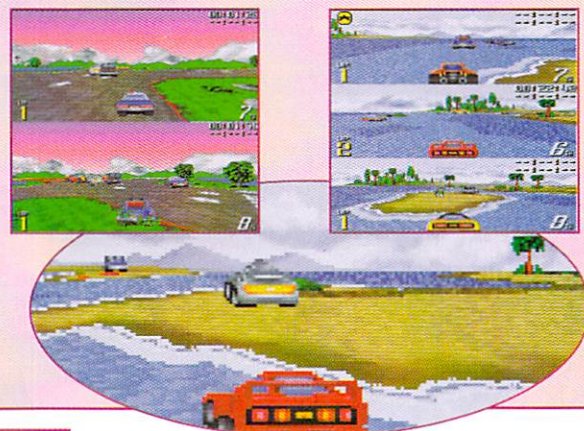
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Xtreme Racing - Awarded 90% AC97

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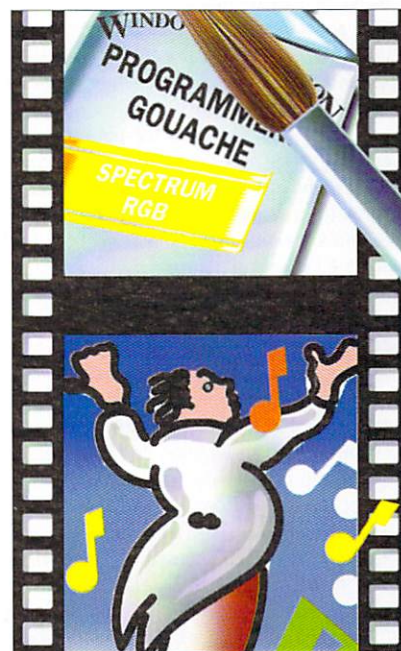
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Amiga Computing reveal why the Amiga still holds the crown of Multimedia



## BARGAINS

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**F**or a few years now ViScorp have made their intentions clear. They wanted to create a set-top box. They also had the technology to do it and a licensing deal with Amiga Technologies would allow them to do it. Then the first glitch in the plan happened. ESCOM – then owners of AT – went bust and ViScorp fearing for their project tried to buy the whole of Amiga Technologies.

We were told that the acquisition was under way and it was only a matter of weeks before the deal would be completed. That was back in April when a 'Letter of Understanding' was signed between the two companies. It is now November and it has been revealed that ViScorp could now face challengers to their bid – apparently ESCOM's bankruptcy made matters more complicated than anticipated and so the deal still remains up in the air. If ViScorp lose their bid, who knows where this will leave the future of Amiga?

What is clear is that in the time that has elapsed, there have been many other companies who have had their eye on an emerging set-top market. US company Diba, for example, have plans to launch a set-top box and are looking for partnerships with companies such as BT and Pipex. Italian firm Olivetti also have something called Envision which even has a wireless keyboard for the true couch potato. This turns a TV into a PC – however, the price for such a machine will be around £1,400 for the cheaper model.

This is a pricey option for the average family and perhaps doesn't pose much of a threat to what ViScorp are setting out to do and the market they are aiming for. However, Philips are also continuing the trend of low-cost Internet solutions – they plan to launch a £99 system for the CD-I.

And while all this has been going on, what about the long-time Amiga fans? Ever since Commodore went bust, it seems we've had nothing but empty promises from one month to the next. ViScorp heralded a new era of hope – they weren't the huge faceless PC company ESCOM were. They had long connections with the Amiga. Although many were concerned they would simply rip out the structure of the Amiga to be used in their set-top systems and neglect the Amiga mar-

## amiga comment



**ViScorp's set-top box – an excellent concept but needs to be released soon**

# What Next For Amiga?

**Tina Hackett** asks if the 'Curse of the Amiga' has struck again?

ket as a whole, talk of new projects on the horizon sparked a ray of hope in many of us.

But now what is the Amiga community to think? It doesn't help matters that there are reports that ViScorp have financial troubles and that two of ViScorp's key staff walked out recently. And now we hear that there are other companies after the Amiga, so the wait continues.

This is the worst thing that could happen right now – more uncertainty and waiting for something to happen. Even the most loyal users will lose hope – their patience has

been tested to the limits as it is. While the acquisition still goes on ViScorp could be in danger of losing support from the Amiga community and falling behind in the race to get a set-top box out onto the market.

At any rate by the time you read this, who knows? We could have another proud new owner promising great things and telling us what we want to hear...

*Tina Hackett*

Tina Hackett, Editor

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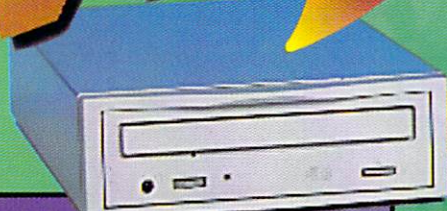
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# news

By Tina Hackett,  
Gareth Lofthouse  
and Hugh Poynton

## VIScorp bid for AT withdrawn by Gareth Lofthouse

**V**IScorp, the maker of Amiga set top boxes, has cancelled an offer of \$20 million for the acquisition of Amiga assets from the bankrupt German PC company, Escom. Growing financial problems mean the Chicago-based company may be unable to go through with the buy-out of Amiga Technologies it was expected to complete last October.

The company, which plans to continue the development of the Amiga computer range, decided to let its offer expire on 2 October 1996. VIScorp cancelled because it believes the assets are no longer worth the \$20 million it was originally offering.

"One of the most valuable pieces of inventory is currently encumbered in a complicated legal challenge to the ESCOM AG bankruptcy estate. Without the assurance that this piece could be delivered as part of the package deal, VIScorp began to reconsider its offer," said Hugh Jencks, VIScorp's chief operating officer.

Mr Jencks said that VIScorp remains interested in completing the acquisition of the Amiga, and that following the expiry of the original offer the company submitted a lower bid. VIScorp says its plans for introducing an interactive television product depend on both the Amiga technology and the support of the installed base of Amiga users.

Although the contract expired on October 2, VIScorp continued to operate Amiga Technologies until October 31 at its own expense and with the concurrence of the Trustee. It did so believing that Amiga Technologies was of more value as an operating company, and it wanted to retain its value. During this time the company paid Amiga Technologies' salaries and generated over \$2 million in sales which have been credited against the final sale price.

VIScorp's future is threatened, however, by

### Financially troubled company allows acquisition contract to lapse

financial insecurity. In a document filed at the US Securities and Exchange Commission on October 30, the company admitted that it "cannot currently generate sufficient revenues and cash flow from operation to meet its business obligations."

These financial problems, combined with the fact that the company has run at a loss since its inception, mean that VIScorp's business requires funding to continue development of its set top box products. However, the Commission file warns that investment in VIScorp is 'highly speculative' and that there is 'doubt as to whether the company can continue as a going concern.'

VIScorp's chairman claims that funding arrangements are currently in process, though how much the company requires remains unspecified.

David Robinson, the lawyer overseeing the ESCOM liquidation process has stated that VIScorp is no longer the leading candidate for the acquisition of the Amiga assets. If the company fails to acquire the Amiga, it is uncertain as to whether it will be able to base its set top boxes on Amiga technology.

To date VIScorp has used this technology to develop ED, a set top box, under licence from ESCOM. However, Robinson claims that if VIScorp fails to acquire the Amiga assets the licence will be cancelled. If that happens, VIScorp hopes any new owner of Amiga Technologies will be willing to relicence it to allow it to continue to produce ED as planned.

David Rosen, who has replaced Jason Compton as communications manager, declined to comment on the effect the company's financial situation will have on their production plans for ED. VIScorp were planning to introduce ED as an Internet-TV device in early

1997.



## QUIKPAK LEADS BUY-OUT RACE

Following VISCORP's decision to lower its bid for Amiga Technologies, QuikPak, the Canadian-based Amiga manufacturer, is now rumoured to be the company most likely to acquire the Amiga assets.

Quikpak, with head-quarters in Toronto, is the current North American distributor for Amiga Technologies and the only authorised manufacturer of Amiga computers in North America. The company had hoped to finalise a deal with the liquidators on December 13, but at the time of going to press the deal had not been completed.

"QuikPak is currently involved in negotiations with the liquidators, but at the moment nothing is finalised," said Dan Robinson, the company's director of business development for Amiga. The company was unable to outline the nature of its negotiations more specifically at the time of writing.

However, Mr Robinson pointed out that QuikPak has numerous reasons for

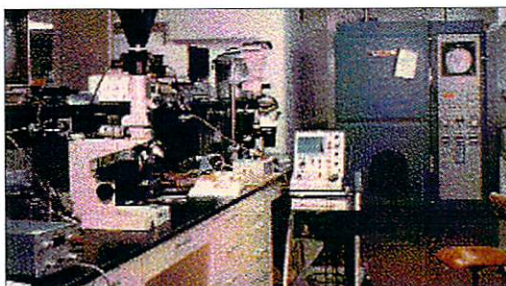
wishing to acquire the Amiga technology. "I feel that you can read a lot into our actions. We've been developing the A5050T and A4060L, as well as producing '060 accelerators for the Amiga," he commented.

"We are advertising aggressively in the North American publication *Amazing Computing*, and had a large presence at the recent Amiga Fest show in Toronto. Clearly Quikpak believes there is a strong future for this platform," he added.

The A5050T and A4060L are new Amiga machines based on the 4000T that QuikPak currently have in development. The company has also been shipping '060 4000Ts for about \$2700, while prices for standard 4000T have dropped below \$2000.

QuikPak took the Amiga's distribution for North America over from Service Management Group, after Amiga Technologies terminated SMG's contract.

By Gareth Lofthouse



QuikPak's factory based in Toronto

## VISCORP ASKS FOR INJUNCTION

A San Jose court has issued a preliminary injunction against the source of Curtis Mathes Holding Corp's Uniview interactive television device, prohibiting further use of proprietary technology developed by VISCORP.

A recent announcement from VISCORP said that it had filed a complaint against Interactive Video Publishing saying that it misappropriated its trade secrets and technology and licensed this to Curtis Mathes. Interactive Video Publishing, Steve Owens, Kaori Kuwata, David Owens and "all those in active concert or participation with them" were enjoined from using any of VISCORP's trade secrets or technology.

As yet no date for the trial has been set. However, the court found that VISCORP "will probably succeed on the merits of its claim that defendants used improper means to acquire VISCORP software trade secrets, and, therefore have misappropriated VISCORP trade secrets."

The company expressed concern in early December when it discovered that the intellectual property was being pirated by both small and larger companies and, to deal with this, it teamed up with Mahr Leonard Management Company, a Texas firm specialising in patent infringement.

## COMPTON QUILTS VISCORP

Only weeks after the dramatic departure of Carl Sassenrath from VISCORP, it has emerged that another key member of staff, Jason Compton, has also resigned. However unlike his former colleague, Compton, who was VISCORP's communications manager, has said little publicly about his reasons for leaving.

He told *Amiga Computing*, "The details are between myself and VISCORP but basically I was not comfortable with the present work environment and did not feel I was adequately equipped to perform my duties as an independent contractor."

Sassenrath was more vocal about his explanation for leaving the company and he posted an announcement to a newsgroup saying that he'd "never seen such an idiotic, screwed-up, incompetent company." He has now followed this up with a statement of his intentions for the future.

Unhappy with the state of the PC market, he intends to build a system that is simple to use. He remarked, "The software is to blame. We have become enslaved by overly complex and twisted software...They are all junk - the work of designers who really don't understand how our minds work or relate to our human condition." He encourages the Amiga community to "hold on, regardless of how desperate the situation may seem."



## GRAB SOME GOODIES

Ocean's budget label, Hit Squad, has launched a special bargain offer in conjunction with toy retailer, Beatties - gamers will be able to buy one title and get another free. Among the Amiga titles are *Worms*, *Desert Strike*, *Populous 2* and *Desert Strike* - if any of these are purchased you can choose either *Player Manager 2*, *Cannon Fodder* or *Fantasy Manager* for free.

## SAINT SAMSUNG

Samsung is supporting the international cause of human rights by donating equipment to the United Nations Centre for Human Rights in Geneva. Along with the Government of The Republic of Korea, the company has donated £304,500 worth of computer equipment and support to help the UN centre's computerisation project.

## DIRECT SUPPORT

Net Direct has become the most recent British ISP to introduce the US Robotics high speed x2 modem. The modem's Internet connection speed of 56 Kbps is almost twice as fast as the connection speeds currently available over ordinary telephone lines.

So far, 40 ISPs across the world have agreed to participate in field trials of the new modem.

## AURORA LAUNCHES

A new Canadian company has been set up which claims to be 'dedicated to advancing the Amiga platform'. It is mainly concentrating on games development with a focus on using 'retargetable graphic standards, such as CyberGraphx, and accelerators, such as 060 boards and the PowerPC technology, along with the AmigaOS to create games that are system friendly in a multi-tasking environment'. See this month's games news for details on some of its forthcoming releases. Information is also available from its web site which is at (<http://www.auroraworks.com>).



Aurora intends to advance the Amiga platform

## NOVEMBER CHARTS

GTI, the Amiga mail order company, has revealed its November chart for software sales. Topping the utilities chart is Turbo Print Prof 5.0, closely followed by I-Browse and Personal Paint 6.4. As for the Amiga CD Rom chart, Aminet 15, Meeting Pearls 4 and Aminet set 3 take the three top spots. On the games front Click Boom's Capital Punishment, proves the most popular, closely followed by Worms and Hugo.

## BAH HUMBUG

If Christmas left you with a good dose of the Ebenezer Scrooge, you're probably not alone. To join like-minded Christmas cynics, type in to your browser <http://www.esrc.ac.uk> and go to the Economic and Social Research Council home page. Here you can find out why turkey is less popular than it used to be and also what has caused Shopoholics to lose their Christmas spirit - apparently shopping addicts do it either out of revenge or because they are unhappy with their relationships. Hmm..

from the **ESRC**  
and a happy  
new year

Christmas cynics can revel in the festive facts on shopping and turkey

## CASH CONUNDRUMS

Following the requests of many of our US readers, we are now including a Money Conversion Chart. As many of our prices are written in pounds this will hopefully help out readers who want to get an idea on how much this equals in US dollars. Please remember these are only approximates and will depend on the exchange rate at the time. You can get a regular update from Xenon Labs currency converter (<http://www.xe.net/currency/>)

Where possible we will also try to include a suppliers US phone number or an Email address to save you making long-distance calls.

Approximate Exchange Rates as at December 9

| UK Pounds | US Dollars |
|-----------|------------|
| £1        | \$1.65     |
| £5        | \$8.24     |
| £20       | \$32.94    |
| £50       | \$82.36    |
| £100      | \$164.71   |
| £200      | \$329.42   |
| £500      | \$823.56   |

## BTA MOVIE WEB

The British Tourist Authority launched its Internet Movie Map of Britain web site. It is based on the hugely successful BTA leaflet and offers visitors an impressive amount of information on film and TV locations around the UK.

You can search for television programmes and films by name, location or tour and even includes a journey planner so you can obtain detailed and accurate directions to the site. Taking up 300 pages, the Movie Map offers a vastly larger amount of information than the leaflet upon it was based and includes features such as a journey planner which will also estimate the cost of petrol, and detail petrol stations en route.

For further details phone 0181 563 3033.

## PERFECT IMITATION

Blittersoft has announced a new software Pentium Emulator. Called the PCx, it is an all new 80x86 emulation and according to Blittersoft the speed is about three times faster than v2.3 of EMPLANT's e586DX emulation in protected mode. It will run on any Amiga with a 68020 or later processor and no additional hardware will be required.

Various features will be included such as an Intel Pentium Processor instruction set, Sound Blaster (mono) emulation, and Video board support.



Blittersoft has announced a new software Pentium Emulator, the PCx

**WIN!**  
**£400 worth**  
**of Software**

**Ten copies of Personal Paint 7 worth £39.99 each are up for grabs.**

Cloanto has given us 10 copies of its excellent art package, Personal Paint 7 and all you have to do to try and win one is produce a work of art with your Amiga. This can be done in any Amiga package and can either be sent in on disk or as a print-out. Please label everything you send us and complete the entry form.

### Personal Paint entry form

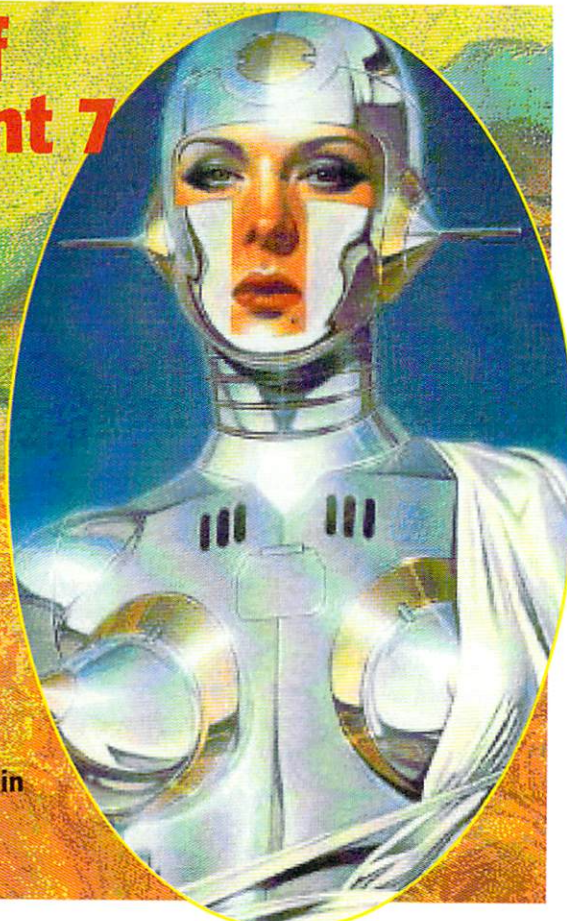
Name: \_\_\_\_\_

Address: \_\_\_\_\_

Where did you find this copy of Amiga Computing? \_\_\_\_\_

☐ Please tick if you do not wish to receive promotional material from other companies

We will be including a selection of these pictures in a forthcoming issue - so you could also see your work in print.



# The World's FASTEST and... now the BEST VALUE too!



68040 VERSION CAN  
BE EXPANDED TO A  
FULL 68060



NEW 3D  
VERSION!

## CYBERSTORM II

### AMIGA 68040ERC and 68060 ACCELERATORS

Now you can choose between the 68040/40ERC Cyberstorm II or the ultra powerful 68060 version. When you fit a Cyberstorm II 68060 Accelerator to your A3000, A3000T, A4000 or A4000T you can, for example, render a graphic with Imagine 2.0 software in just 2.4mins. Compare that with a massive 10.34 mins on a standard A4000/040/25! With no jumpers both Cyberstorm IIs are fully plug and play and A4000 users can choose the option of a SCSI-2 module (A3000 users already have SCSI built into their Amiga hardware).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMS from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 module available
- If your budget currently only covers the cost of a Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for extra power.

|  |              |          |
|--|--------------|----------|
| Cyberstorm II 40MHz 68040ERC - 0Mb - Expandable to 128Mb   | PRICE CRASH! | \$329.95 |
| Cyberstorm II 50MHz 68060 - 0Mb - Expandable to 128Mb      |              | \$529.95 |
| Cyberstorm II SCSI-2 Module                                |              | \$89.95  |
| Cyberstorm II SIMM RAM Expansions (please call for prices) |              | &Call    |



### 64-BIT ENGINE A2000/3000/4000 (T Series) 3D Version 24-BIT COLOUR ACCELERATED GRAPHICS CARD.

For all Zorro-II/III Amigas & Tower System A1200s with Zorro-II backplanes. The core of this great board is the NEW VIRGE GRAPHICS CHIP from S3. With 3D capabilities it's able to process complex 3D functions in hardware (eg. shaded/textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D Library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer. OPTIONAL EXPANSIONS...

- MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24 Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a SPECIAL LOW PRICE! - Call for full details now!
- Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot this gives automatic switch over from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-II slots free.

|                      |              |                           |   |
|----------------------|--------------|---------------------------|---|
| Cybervision 64/3D... | 4Mb Version  | <b>\$219<sup>95</sup></b> | <b>HUGE PRICE REDUCTION!</b>              |
| Options...           | MPEG Decoder | <b>\$174<sup>95</sup></b> | Monitor Switcher <b>\$84<sup>95</sup></b> |

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FIGURES BELOW FOR YOURSELF

|   |           |
|---|-----------|
| Std A500/600/1500/2000                                  | 0.55/0.72 |
| Standard A1200  | 1.33      |
| Standard A1000/030                                      | 4.43      |
| A1200 with 1250/IV, 030 & 1Mb                           | 9.91      |
| Standard A1000/010                                      | 19.10     |
| Amiga with 1240T/ERC, 2040ERC or Cyberstorm II 68040ERC | 30.00     |
| A1200 with 1260/060 & 1Mb                               | 38.71     |
| A1500/2000 with 2060/060 & 1Mb                          | 38.71     |
| A1000 with Cyberstorm/060 & 1Mb                         | 39.85     |

Comparative MIPS performance figures  
measured using Sysinfo. Each board had  
the appropriate SIMM fitted (required  
to activate accelerator).

**BLIZZARD 1230-IV, 1240-ERC & 1260 ACCELERATOR BOARD FEATURES...**

- May be disabled with Simple Keystroke on boot up - For Full Games compatibility, even badly programmed older Software!
- Battery Backed Self Recharge Real Time Clock
- High Performance Expansion with Full 32-Bit wide DMA
- Easy Trapdoor Installation - no modifications required (1240T/ERC fits in Tower)
- 1230-IV features PGA FPU. Socket allowing Optional 50MHz, 68882 FPU!

### 1230-IV

A1200 TURBO ACCELERATOR  
and MMU - 50MHz 68030  
0Mb Standard, Exp. to 128/256Mb  
9.91MIPS with 60 Nanosecond SIMM fitted

**Blizzard 1230 MkIV Turbo Accelerator Memory Board**  
The highest performing 68030 accelerator available for your A1200!  
With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE! With a Sysinfo rating of 9.91 (using a 60 Nanosecond SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can be easily fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32-Bit FAST RAM (or up to 256Mb with the SCSI-2 option using its extra SIMM socket).

1230-IV Turbo 50MHz 68030 & MMU  
0Mb, 32-Bit Fast RAM  
Expandable to 128/256Mb  
Fast 60 Nanosecond SIMM RAM  
Expansions  
32-Bit, 72 pin (Call for prices)  
Motorola Maths Co-processor  
68882 PGA type FPU, 50MHz

**\$139.95** PRICE CRASH!  
&Call

EASY TRAPDOOR  
INSTALLATION  
No modification necessary.  
Reliable low heat output.

### 1240T/ERC

A1200T\* TURBO ACCELERATOR  
and MMU/FPU for \*TOWER SYSTEMS  
40MHz 68040 - 0Mb Std, Exp. to 128/256Mb  
30MIPS with 60 Nanosecond SIMM fitted

**Blizzard 1240T/ERC Turbo Accelerator Memory Board**  
A super LOW COST A1200 Turbo Accelerator Board, ideal for housing on any \*Tower System A1200 main board (mechanical dimensions, high power consumption and heat emission require an active cooling cap - we therefore do not recommend fitting to standard A1200's without the appropriate modifications etc.). The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - an excellent guaranteed and competitively priced alternative. Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

1240T/ERC Turbo 40MHz 68040 & MMU/FPU  
0Mb, 32-Bit Fast RAM - Expandable to 128/256Mb

**\$249.95** PRICE CRASH!  
Can be expanded to FULL 68060

### 1260

A1200 TURBO ACCELERATOR  
and MMU/FPU - 50MHz 68060  
0Mb Standard, Expandable to 64/192Mb  
38.71MIPS with Single Sided 6070 Nanosecond SIMM

**The Blizzard 1260 Turbo Accelerator Memory Board**  
offers Amiga A1200 owners FULL 68060 POWER with a board that plugs into the trapdoor slot! Your A1200 will operate at twice or even three times the speed of an '040 based upgrade and up to five times the speed of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

1260 Turbo 50MHz 68060 & MMU/FPU  
0Mb, 32-Bit Fast RAM - Expandable to 64/192Mb

**\$469.95** PRICE CRASH!  
EASY TRAPDOOR INSTALLATION  
No modification necessary.  
Reliable low heat output.

### 2040ERC

A1500/2000 TURBO ACCELERATOR  
and MMU/FPU - 40MHz 68040  
0Mb Standard, Expandable to 128Mb  
30MIPS with 60 Nanosecond SIMM fitted

**Blizzard 2040ERC Turbo Accelerator Memory Board**  
The Blizzard 2040ERC is a super new LOW COST board which offers A2000 owners the opportunity to upgrade to the same performance as our Blizzard 1240T/ERC board. Users will then be able to enjoy full A4000/040 power as well as take advantage of the built in SCSI-2 interface.  
The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - an excellent guaranteed and competitively priced alternative.

2040ERC Turbo 40MHz 68040 & MMU/FPU  
0Mb, 32-Bit Fast RAM - Expandable to 128Mb

**\$309.95** PRICE CRASH!  
Can be expanded to FULL 68060

### 2060

A1500/2000 TURBO ACCELERATOR  
and MMU/FPU - 50MHz 68060  
0Mb Standard, Expandable to 128Mb  
38.71MIPS with 6070 Nanosecond SIMM fitted

**Blizzard 2060 Turbo Accelerator Memory Board**  
offers A1500/2000 owners the same specification as the Blizzard 1260 Turbo (A1500/2000s will operate at up to five times the speed of a standard A4000) with FULL 68060 POWER & also includes built in SCSI-2 interface! If you want the fastest A1500/2000 around... fit a Blizzard 2060 now!

2060 Turbo 50MHz 68060 & MMU/FPU with built in SCSI-2  
0Mb, 32-Bit Fast RAM - Expandable to 128Mb

**\$569.95** PRICE CRASH!

**SCSI-IV KIT** SCSI-2 Module for 1230-IV, 1240T/ERC and 1260, with additional 128Mb SIMM socket  
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Blizzard and Cyberstorm products use MOTOROLA (680X) series processors. They run WITHIN the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40.35 or even a 55MHz CPU 'clocked' to 50MHz! Look out for the MOTOROLA MOTIVATED logo - your guarantee of our commitment to quality and reliability - BEWARE of 'clocked' CPUs!

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What the Magazines think...  
Amiga Shopper 91% STAR BUY "...the Blizzard 1260 is destined to become the ultimate object of desire for A1200 owners"  
Amiga Computing 92% BLUE CHIP "...want the fastest Amiga in the World, get this board!"  
Amiga Format "...Ride on the fastest A1200 in the World..." - 95% GOLD Rating

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# QuickPack unveils new Amigas

**A** miga Fest '96, which took place in late November/early December featured at least a few big name Amiga companies. QuickPack was present with their two new Amiga models, the A5050 and the A4060 L. The A5050 is an A4000T which features the Pentitator, a Pentium/Amiga hybrid motherboard. This includes PCI, ISA, and Zorro slots. The user can switch between the PC and the Amiga at the touch of a button.

The prototype shown also featured an LCD screen built into the side of the tower. This feature has not been planned for actual A5050's, but this could change if enough demand is shown. The A4060 L is the same computer that was shown by Jason Compton at the Amiga Atlanta meeting in August. It is an Amiga 4000 portable which will feature detachable keyboard and a 68060 accelerator, along with Zorro and video slots.

Phase5 was also present, demonstrating the PowerPC/060 board, and spoke about the A/Box as well. Other exhibitors included NewTek, who demonstrated the Video Toaster Flyer; Anti-Gravity Products, who ran Photogenics on a Siamese system, allowing them to run the program in a window on a DEC Alpha running Windows NT; Applied Magic was showing their non-linear video editing system Broadcaster Elite; and Asimware was demonstrating Audio Thunder and MasterISO, their CD-R software.

Both Wonder Computers International and Randomize Computer Distribution have announced North American distribution of products from BioCon. One such product is the Super Scan, Super Scan Flicker Fixer, and the Video Magician. All three of these products feature the ability to use a standard VGA or SVGA monitor with an Amiga computer, along with video features unique to each product. Contact either Randomize or Wonder for more information.



by Katherine Nelson

## SOUVENIRS

Intangible Assets Manufacturing has recently unearthed a treasure-trove of the metal decals featuring the Amiga logo in both Boing! form and the double checkmarks style. These decals have an adhesive backing, allowing them to be placed anywhere desired.

In a special promotion, IAM is offering to include these souvenirs of the Amiga's past in every order until December 31, or while supplies last. This offer accompanies special holiday pricing from IAM. See contact information below for more details.

## CONTACT POINT

**Intangible Assets Manufacturing**  
828 Ormond Avenue  
Drexel Hill, PA 19026-2604  
Phone: (610) 853-4406  
Fax: (610) 853-3733  
WWW: <http://www.iam.com/amiga/>  
E-Mail: [info@iam.com](mailto:info@iam.com)

**Asimware Innovations, Inc.**  
600 Upper Wellington Street, Unit #D  
Hamilton, Ontario, Canada L9A 3P9  
Phone: (905) 578-4916  
Fax: (905) 578-3966  
WWW: <http://www.asimware.com>  
E-Mail: [info@asimware.com](mailto:info@asimware.com)  
FTP: <ftp://ftp.asimware.com>

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WWW: <http://www.freenet.edmonton.ab.ca/~viking/>  
E-Mail: [viking@freenet.edmonton.ab.ca](mailto:viking@freenet.edmonton.ab.ca)  
Wonder Computers International  
1315 Richmond Road  
Ottawa, Ontario, Canada K2B 8J7  
Phone: (613) 721-1900  
Fax: (613) 721-6992  
WWW: <http://www.wonder.ca>

**Randomize Computer Distribution**  
R.R. #2  
Tottenham, Ontario, Canada L0G 1W0  
Phone: (905) 939-8371  
Fax: (905) 939-8745  
E-Mail: [sales@randomize.com](mailto:sales@randomize.com)  
[support@randomize.com](mailto:support@randomize.com)

## INNOVATIVE UPDATES

Asimware Innovations Inc. announced an update to AsimCDF5 v3.7 on December 6, 1996. Included in the update is support for new CD-ROM drives from Plextor, Pioneer, Panasonic, and TEAC. Also, there is now support for Amiga file comments and protection bits. Other improvements were to the raw sector volume handling and the French and German catalogues. This update is available to registered users via the BBS, WWW page, or FTP site (<ftp.asimware.com>). The serial number is required to gain access to this update.

Version 3.7 will also incorporate all of the features of AsimCDF5 v3. This includes the use of several CD-ROM formats, including Macintosh HFS, ISO 9660, and others. Also, the ability to emulate either CDTV or CD32, including the ability to autoboot from the CD. Furthermore, AsimCDF5 v3 supports both Kodak and Corel PhotoCD formats.

Also from Asimware Innovations Inc. is MasterISO v1.25. This version became available in early December, and is an update to MasterISO v1.0. New CD-R drives supported by this software include the TEAC CD-R50 and the Sony CDU-924. This version also supports Kickstart v2.x.

The MasterISO software controls the use of writable CD-ROM drives known as CD-R. Both computer CD-ROMs in the ISO 9660 format and audio CDs in the Red Book standard can be written to with MasterISO. Other supported CD-R drives include Yamaha CDR-100, Yamaha CDR-102, Sony CDU-920, Sony CDU-924, Pinnacle RCD-1000, Pinnacle RCD-202, Pinnacle RCD-5040, HP 4020, and TEACCD-R50.

## SMILE FOR QUICKCAM

Omnilink Corporation has announced that pre-orders are being taken for the AQCVid adapter which allows the use of the Connectix Gray Scale QuickCam (PC version) with the Amiga Computer. Price has been set at \$59.99, and dealer inquiries are welcome.

This QuickCam model allows up to a 320x240 resolution capture, in 16 or 64 shades of gray. The maximum frame rate is 24fps. Its field of view is approximately equivalent to a 38mm lens on a 35mm camera, and has fixed focus from 18 inches to infinity. AQCVid support is tentatively planned for a newer model of QuickCam, which is capable of up to 640x480 resolution and 24-bit color.

AQCVid supports several file formats, including IFF, ANIM5, and ANIM7. JPEG and CDXL may be included in future releases. The current version is CyberGraphX compatible, and will work on ECS or AGA Amigas. 16-bit sound support may also be featured in upcoming versions, as well as the ability to control the camera from ImageFX. Currently, only 3.x systems are supported. Although AQCVid will function on any Amiga, the recommended system will have at least a 68020, 2 megabytes of chip memory, 4Mb of fast memory, and would either have AGA or a graphics card with Workbench emulation.

For sales or ordering information, write to [sales@olnk.com](mailto:sales@olnk.com). Otherwise, contact Northern Light Computing, the official Canadian distributor of Omnilink Corporation at the contact information given in the contacts panel.



Picture taken with QuickCam

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- Supports all recent Amigas and is also fully AGA Chipset compatible. You can render images in any Workbench screen mode resolution including HAM8 mode (Amiga RAM permitting).
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- Software has built in mono and colour animation facilities. Number of frames dependant upon Amiga's RAM.
  - Release 2.6.x software now includes...
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  - User Manual
  - Input sockets for Composite and SVHS.
- A video source cable will be required to match your own equipment - Ask for details.

\* Standard ProGrab hardware is PAL/SECAM/NTSC compatible. Interface mode options are available with PAL and SECAM only. ProGrab™ supports any Amiga with Kickstart 2.04 or later and a minimum of 1.5Mb free RAM.

### STAGE 1...

Select any video source with S-VHS or composite output. This could be your camcorder, TV with SCART output, satellite receiver, domestic VCR/player or standard TV signal passing through your VCR/player... the choice is yours.

### STAGE 2...

With ProGrab's software, select an image you wish to capture using the on screen preview window and Grab (because the hardware grabs frames in real time, there's no need for a freeze frame facility on the source device). Once grabbed, simply download and view the full image on your Amiga screen. ProGrab also includes a Teletext viewing and capturing facility from TV or satellite sources.

### STAGE 3...

Use the 'grabbed' image with your favourite word processor, DTP or graphics package.

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## EXTRACTING COVER DISK FILES

Before you even think of putting the cover disks any where near your computer, make sure you write protect them. Move the black tab in the top corner of the disk, so you can see through the hole. Doing this makes sure you cannot damage the disks in anyway. There is no reason why the cover disks need to be written to, so even if the computer asks you to write enable the disks, don't do it.

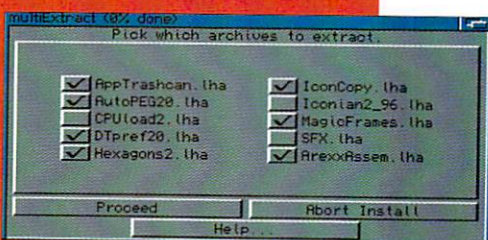
To extract any single archive, simply double click its icon and follow the on screen instructions. If you want to quickly extract the program to Ram, select the NOVICE level on the welcome screen and press proceed once on the current screen and then again on the next. The program can be found in your Ram disk. Normally most programs need further installing, so read the documents on how to do this.

## HARD DRIVE USERS

Hard drive users do not have to boot with the first disk, but you must make sure you have the Amiga's *Installer* program in your C drawer. To make sure your hard drive has the correct files in place, double click on the SetupHD icon. This will check if you have the Installer program and if not will copy it across, do not worry as it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the cover disk files. It allows you to extract a number of files in one go, to your hard disk or Ram.

When you run MultiExtract, you will be presented with a number of check boxes, each representing one of the programs on that cover disk. Just deselect all the programs you do not want extracting and then press proceed. All selected programs can now miraculously be found in the selected destination.



This is MultiExtract for all you sensible people with hard drives

EXCLUSIVE  
FULL GAME

# The coverdisks



For all you would-be boy racers get ahead of the pack and get some practice in with the XTreme racing

## XTREME RACING

Author: Stilltuna  
A1200/A4000

It is one of the highest rated racing games of recent times and it's all here for you to play. XTreme racing has it all: Mario kart playability, one, two, three and even four player modes, null modem link up modes, single races and cup modes raced over 12 different tracks in six environments. There is so much here you

will be playing this till your fingers are gnarled, boney stubs.

The original XTreme racing came on three disks but the authors have managed to compress it onto two. So before you can go ahead and play the game you will have to decompress the game either onto your hard drive, nice, or onto three spare floppies – a bit poo. Read the step by step guide if you have any problems.

There are lots of little hidden extras in XTreme racing you should check out. Once you have started a game press the escape key and a mini

menu will pop up. Using the cursor keys you can browse around this and change options using the return key.

Depending on which menu page you are on you can quit the game or on other pages you can control the screen size and pixel resolution. You can even set up a tracking camera so you can watch yourself drive around the track, yes very useful.





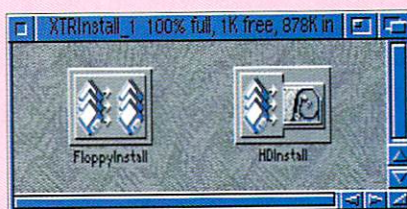
## INSTALLING XTREME RACING

XTreme racing is not a small game and the authors have had to physically crowbar the game onto those two bulging disks you have in your sweaty mitts. Before you can play the game you will have to install it on your hard drive or three spare floppies. Hard drive users have it the easiest.

1. Boot up your machine with your hard drive
2. Insert the first cover disk
3. Double click on the XTreme disk icon
4. Double click on the HDinstall icon
5. Follow the on screen instructions

Floppy only users need to have three formatted blank Amiga disks at hand and have them named XTR1, XTR2 and XTR3.

1. Boot with your original Workbench disk
2. Format three spare disks
3. Name them XTR1, XTR2 and XTR3
4. Insert the first cover disk
5. Double click on the XTreme disk icon
6. Double click on the Floppy install icon
7. Get ready for a lot of disk swapping
8. Follow the on screen instructions



## FAULTY DISKS

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

**TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.**

Please allow 28 days for delivery

## GET CONTROL

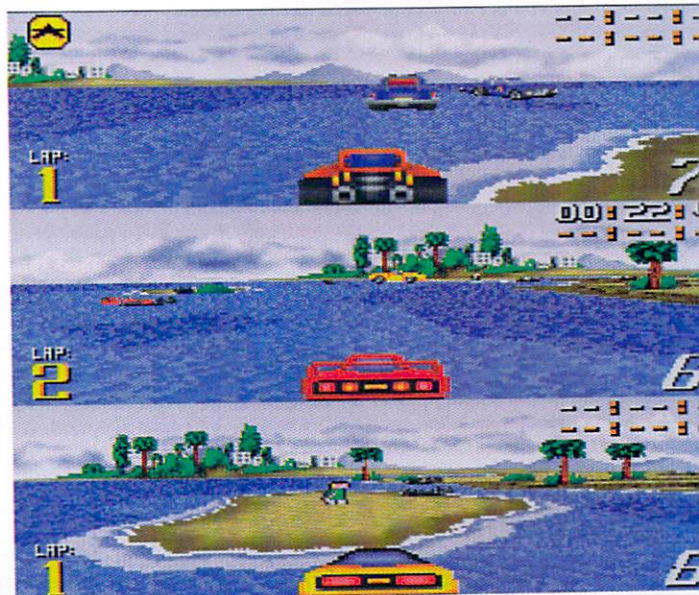
Hey why do you have to read this? It's a driving game you go around the track as fast as you can, what more do you need to know?

Well, if you need to change the controls from the main menu select set up options and go to the top and select change controls. Here you can redefine keys and select which players should use which joysticks. If you have access to a two button joystick or even a CD32 pad XTreme racing can take advantage of these as well.

You should also check out the main set up screen as well - there are some handy options you can change here as well. The number of laps you want to race, the sound track you race to, if weapons should be on and if humans get an advantage over the computer - and you should really.

When you first start, XTreme racing is set up for players one and two to use the keyboard and the keys are set as below. Players three and four are set to use joysticks.

|       | Player 1 | Player 2 |
|-------|----------|----------|
| accel | q        | rshift   |
| brake | a        | ralt     |
| left  | n        | KP 1     |
| right | m        | KP 2     |
| fire  | lalt     | amiga    |



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Most items are directly usable from the CD's

Suitable for any KS2/3 Amiga

**IN-TO-THE-NET** (CD224) £19.99

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Contains around 5000 erotic hand drawn images in the Japanese anime tradition.

This CD is of an Adult nature and should not be purchased by anyone likely to be offended by drawings depicting nudity and / or sex acts.

Includes images only suitable for persons over the age of 18.

**ANIME BABES (18)** (CD151) £14.99

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Mick Davis's Cartoon Clipart Volume One is a new Amiga CD-ROM containing around 500 commissioned cartoon images, all of which can be used "royalty-free". Each image is stored as IFF, and all have been scanned at the highest possible resolution to ensure the best quality when printed. Supplied with a 30+ page printed index of each image. Every commissioned image on this CD is 100% original and does not/will not appear on any other CD-ROM.

**MICK DAVIS' CARTOON CLIPART** (CD236) £24.99

**MAGIC WORKBENCH ENHANCER V2**

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| Inter-ACT       | ✓                 | ✗       | ✗            |

\*Requires an Amiga 1200 or 4000, a hard drive, a CD-ROM drive and 4mb+ of ram. (5mb ram recommended)

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| SEARCH MODES    | NORMAL/DEEP       | NORMAL  | NORMAL       |
| FILMCLIPS       | ✓                 | ✗       | ✗            |
| SUPPORTED       | ✓                 | ✗       | ✗            |
| MUSIC           | ✓                 | ✗       | ✗            |
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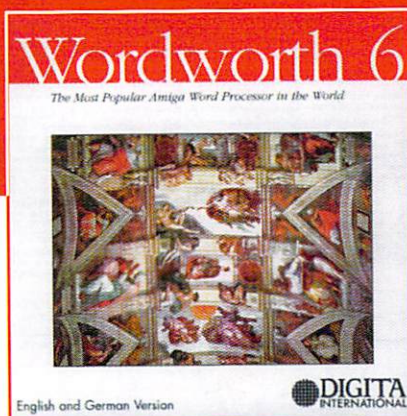
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# Word to the wise

**L**ooking back at my last review of Wordworth almost a year ago I ended the review by wondering what, if anything, Digita would be able to add to Wordworth if they ever brought out a new version. Now that a new version has been released my question has been answered, and that is not a lot.

This time round Digita are really pushing the CD version, with them throwing in 50 fonts and a 1000 pieces of clipart. Having also looked at TurboCalc and Personal Paint both of which also came on CD I can greatly recommend you go for the CD version every time as it save you messing around with wads of floppy disks when installing the program to your hard drive.

Last time I look at Wordworth I made the point that it still did not have DataType support and it would have been one thing I expected to see added to any update but unfortunately it is still missing from version six.

You could try to weasel out of DataType support by saying as they only use 8 bit

**Digita** have just released what they say is version six of **Wordworth**, but **Neil Mohr** wants a recount

colour why compromise the quality of your documents, but that does not stop them supporting the new 24 bit picture DataType. Even if it is public domain, programs like iBrowse seem to be benefiting from it.

I may have forgiven them for not adding DataType support if they had bothered to add a Jpeg import module, but this is not even there and as the Jpeg decompression/compression source is freely available I cannot see any excuse for it. Personally I think supporting what is now one of the most widely used picture formats is quite important and I would gladly swap the Gem, PCX and BMP filters which I would probably never use for a Jpeg one.

Do not get me wrong Wordworth is still an excellent program, but why bother calling this version six when it is blatantly not. All they have done is shove it on a CD and added a couple of minor features. I still think since version five that Wordworth pips FinalWriter in the Amiga word processor race, mainly thanks to its much greater system conformity, I actually like being able to use MagicMenus you know Softwood. Anyone looking for their first Amiga word processor will not be sorry if they pick Wordworth six, but owners of version five thinking of upgrading, unless you want to spend 20 quid on what is essentially a clipart and fonts CD I would not bother.

## WHAT IS NEW THEN?

### DRAWING TOOLS

Probably the latest addition that will be of most interest to people are the new drawing tools. In previous versions your drawing tools were pretty limited even though Digita did give you a lot of freedom over the tools that were available, with the line type, width, colour and fill of the object totally definable by the user. You were however stuck with plain old lines, rectangles and ellipses.

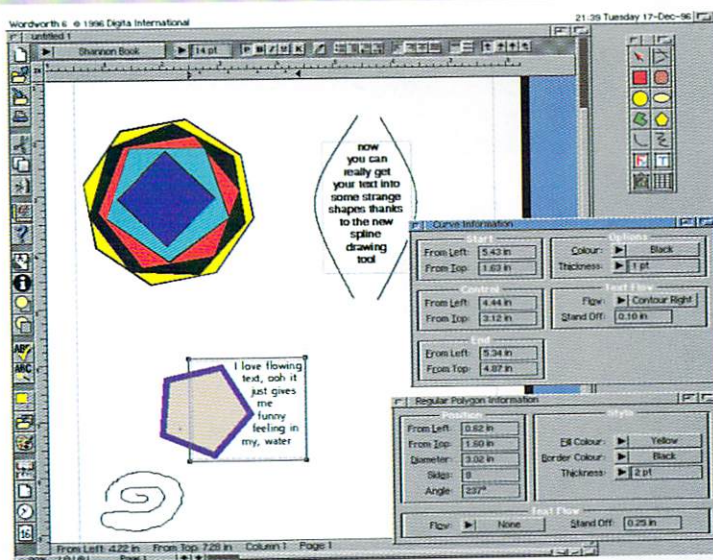
This new version adds some useful, if not overly due new tools. Straight off you have two polygon tools, one produces regular shaped polygons. The type that has the same sized sides. When drawing a rubber outline of the polygon is displayed and you can rotate and size this until you are satisfied and the polygon will be drawn, and of course you can resize and move the polygon whenever you like.

As with all the other drawing tools double clicking on a previous polygon will pop up its information requester from which you can alter the polygon settings. Such as the number of side, angle of rotation and what sort of text flow you want, if any at all, and the new tools retain the modeless requesters so that you can leave their information requester open and carry on editing the document

as well as being able to instantly see changes you make.

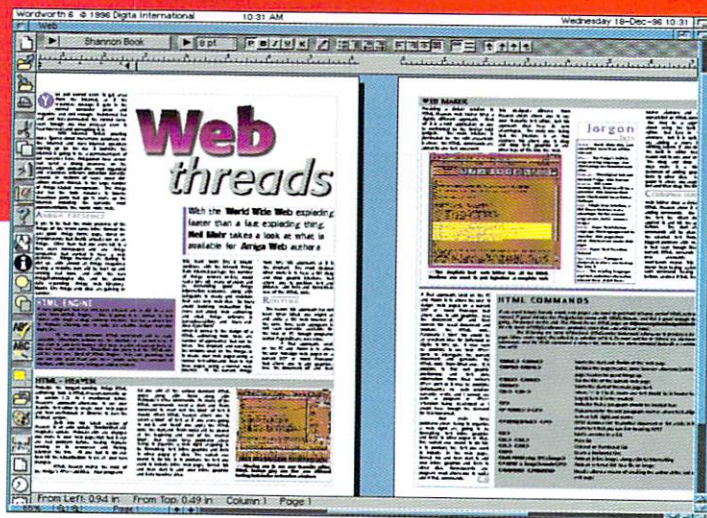
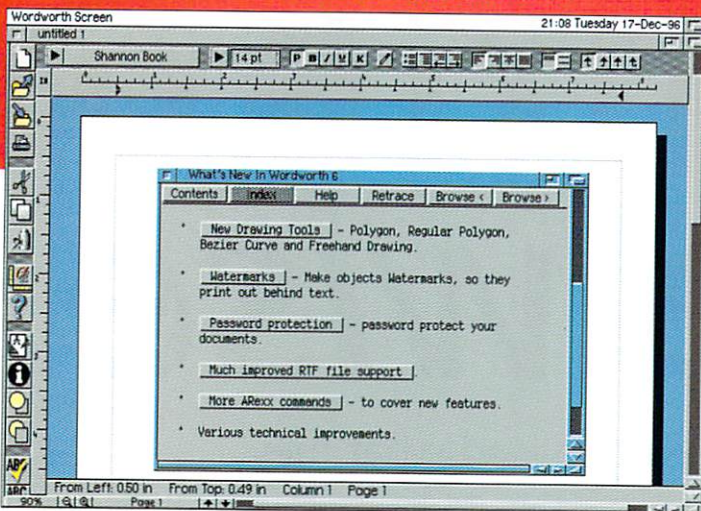
The second polygon tool allows you to draw a irregular polygon, by linking together any number of lines you like, or by holding down the control key you can draw a freehand polygon and then apply the usual line and colour options.

Along with these polygon tools a couple of line tools have been added to compliment the straight line tool, which offers all sort of drawing tools but is at the end of the day, straight. A bezier curve tool lets you add nicely curved lines to your documents, once there three control points let you adjust the start and end points, with the middle one adjusting the amount of curve, all fairly simple but they work. It would have been nice to have seen the arrow



options from the straight line version of the drawing tool having made it onto the curves, but then maybe in version seven? The other drawing tool is a free-hand mode that just lets you scribble a line over your document and then scale it to whatever size you like.

sure you all want to know what is new for version six, well as you can see from Wordworth's own help guide, not an awful lot



Wordworth is still a highly versatile program and will allow you to create the most complex of documents, even to the point of magazine layouts

## RICH TEXT FORMAT

Hardly a new addition that is going to shake the computing world, but now Wordworth has extra support for the RTF or Rich Text Format. This is a standardised way of saving off documents that can then be transferred to any other RTF compatible word processor and the document will retain a minimum amount of the style and formatting that it had on the original program.

Wordworth recognises the basic RTF formatting commands such as tabs, paragraph marks and more importantly font sizes and styles. What you can now do is specify replacement fonts types. If you are regularly importing RTF files from a PC or Mac the chances are they use different fonts to that of Wordworth, to help improve the translation of documents you can now specify replacement Wordworth fonts for the imported files by manually editing a text file in the wwFiles drawer.

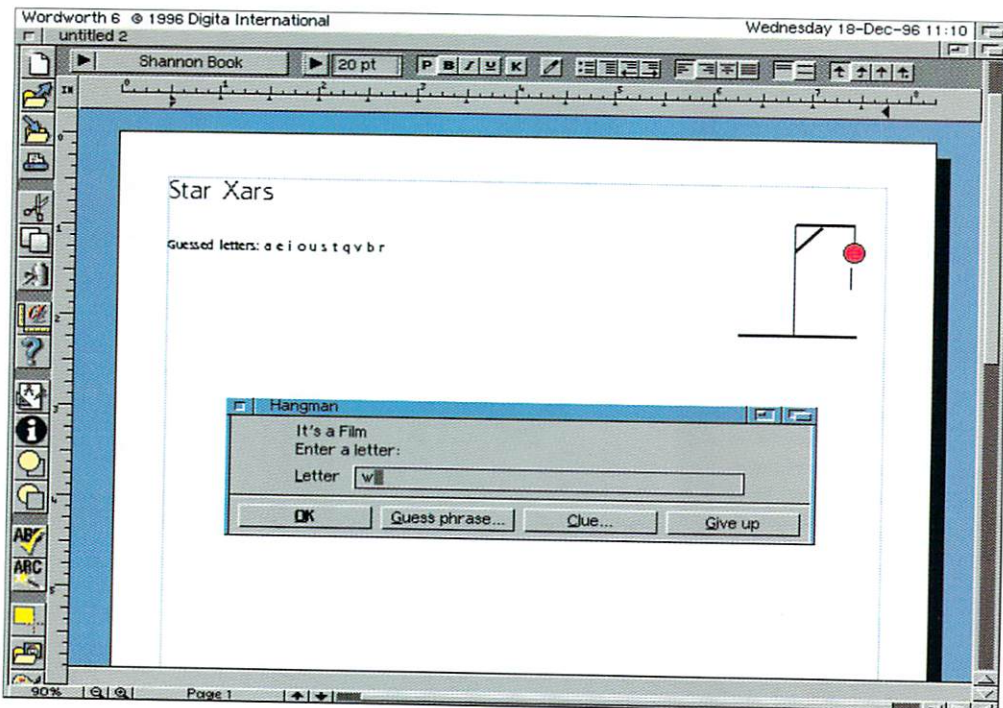
## BITS AND BOBS

Now we are getting to the real minor additions, the most useful of which is what Digita have called watermarks and simply allows a Wordworth object to be used as a backdrop to a document. What this does do is help to keep graphics separate from your text as to manipulate a watermark object you have to hold down an alt key before Wordworth will allow you to change it.

If you are worried about evil people getting to your documents you can now password protect them, with a password. They are also encrypted so even though the document can be loaded into Wordworth 5 it will only appear as gobblygook.

On top of this Digita have updated Wordworth's ARexx port with new support commands which could be of particular help with Wordworth wizards. It is a shame

*If you are worried about evil people getting to your documents you can now password protect them...*



## Bottom line

### REQUIREMENTS

RED essential BLACK recommended



### PRODUCT DETAILS

|          |                         |
|----------|-------------------------|
| Product  | Wordworth 6             |
| Supplier | Digita                  |
| Price    | £39.99                  |
| Tel      | 01395 270 273           |
| E-Mail   | info@digita.demon.co.uk |
| WWW:     | http://www.digita.com/  |

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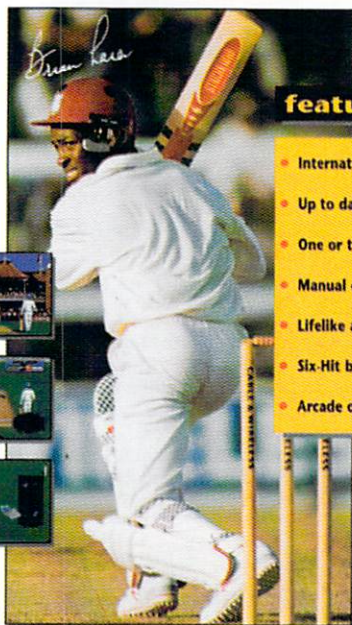
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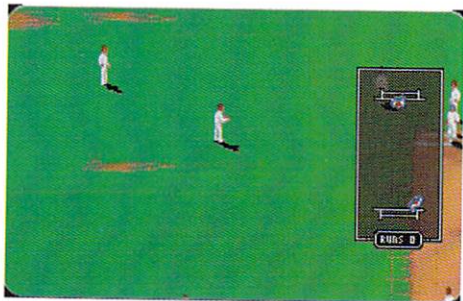
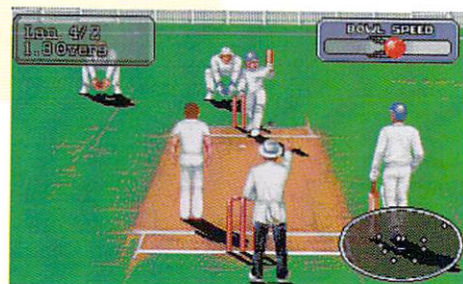
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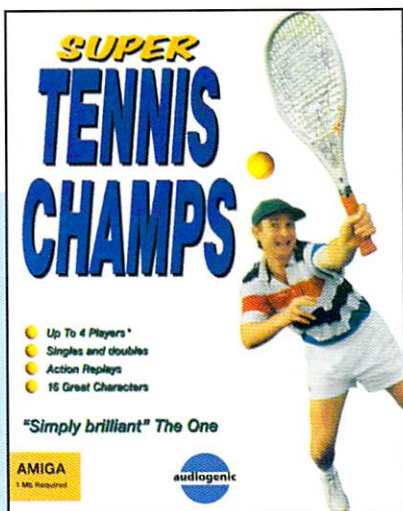
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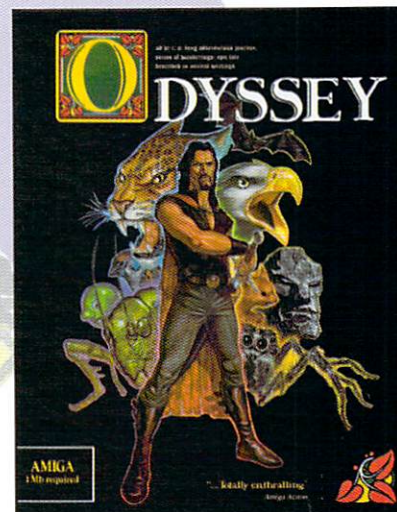
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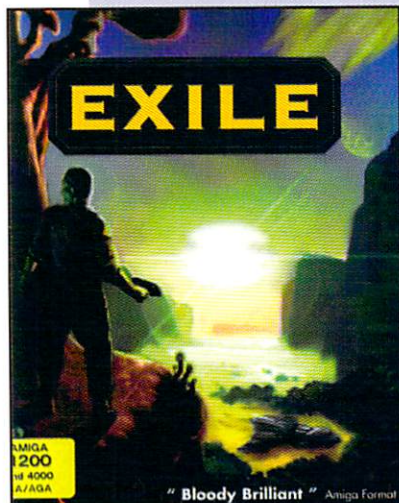


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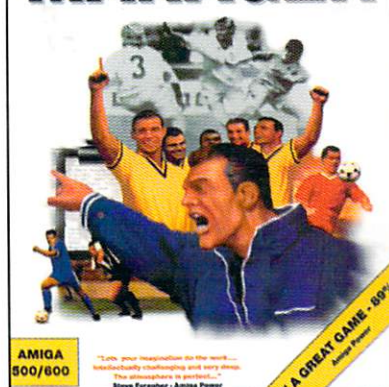


**EXILE** was a classic when first released and the AGA version exploded the myth that you can't have great gameplay and superb graphics in the same game. Acclaimed Game of the Year by one magazine, it is one of the few truly ground-breaking titles of all time.

The world of Exile feels so real as you are weighed down by gravity, blown around by gusts of wind and pummelled by squawking birds. In fact there are so many fascinating puzzles in this true arcade adventure that you'll probably still be enjoying it in the next millennium! Versions for A500/600, A1200 and CD32.



### SUPER LEAGUE MANAGER



**SUPER LEAGUE MANAGER** is a football management sim with a difference - it's more true to life! Instead of providing sheaves of statistics that just aren't available in the real world, you must use skill and judgement to turn a team of no-hopers into a League-winning side. Versions for A500/600 (not 1200 compatible) A1200 and CD32.

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**T**he 2D Amiga artist must have been feeling rather abandoned of late. Once catered for by the likes of incredibly good value paint programs such as Deluxe Paint and Brilliance, these champions of computer creativity ceased development when the going got tough.

Fortunately there was always a third contender for the title of top Amiga arts program. Designed by the Italian-based company Cloanto, Personal Paint has developed from humble beginnings over the years to become arguably the best painting package available for the platform.

The latest update, version 7, maintains Cloanto's attachment to stylish, novel packaging. Expecting the traditional box complete with disks, manuals, registration cards and so on, I received a tiny envelope containing no fewer than three so-called limited edition copies of Personal Paint 7. This is because it now comes packaged in a gimmicky mini-CD format. This looks really neat, but since I'm one of those unfortunates with an age-old caddy CD drive, it meant I had to fiddle around with a CD adaptor before I could boot up the program.

Perhaps a more serious fall-back associated with this format is that the only documentation to be found is stored on the CD - along with a printable registration card and trouble-shooting tips.

While the manual is actually very comprehensive and includes a tutorial that proves invaluable for the beginner, does anyone really want to have to print off an entire manual before they've even got started with the program? I suspect not, but printing it off is unfortunately preferable to trying to find your way around it on-screen, thanks to the omission of a topic index. Still, if sticking the documentation on CD helps keep the price of Personal Paint so low, I suppose most of us will be willing to make the sacrifice.

Anyone expecting a radical overhaul will be disappointed. All you'll find is the familiar tool box on the left and the perfectly functional list of menus at the top - basically the unpretentious but effective interface Personal Paint seems to have used since time immemorial.

# Picture Perfect?

The ever popular Personal Paint 7 is back offering yet more value for money to those with artistic inclinations. **Gareth Lofthouse** puts Cloanto's latest offering through its paces

Typically, when it comes to most updates of Amiga software these days, the alterations in this version of Personal Paint are subtle rather than ground-breaking. That said, if it ain't broken it don't need fixing. Instead of a new program, fans of Personal Paint will be happy to discover numerous enhancements beneath that reassuringly familiar surface.

There have actually been over 100 different enhancements made to the program, though many are of a rather subtle nature. The priority has been to clean up any remaining compatibility problems and get the interface working as smoothly and effectively as possible. Hence version 7 now automatically checks

hundreds of parameters on your Amiga, adapting itself to the CPU, chip set, graphics system, memory and operating system version.

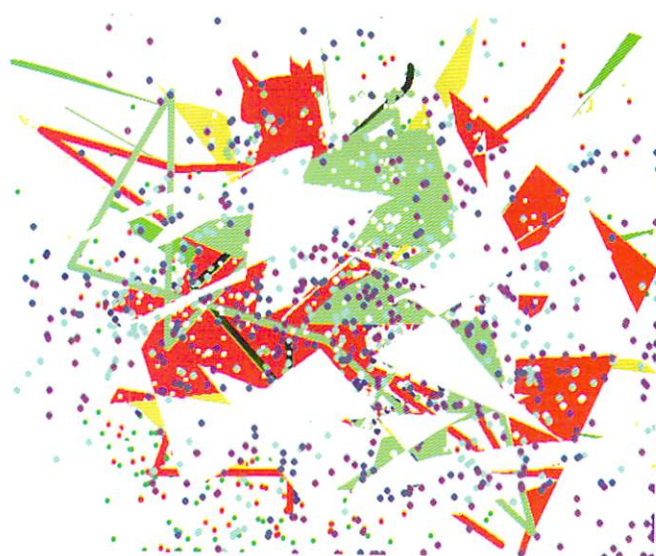
This means, for example, it will try to run in your favoured screen mode without requiring any configuration, plus it will also detect things such as whether your Amiga is using a non-standard blitter.

That said, at first the program kept crashing our A4000 everytime I tried to load it. It turned out that it was, for some reason, incompatible with MCP, the PD software we use to enhance icons and gadgets on Workbench. Once MCP was dis-

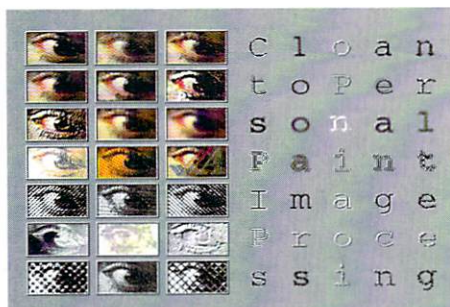
*It remains the perfect choice - simple, flexible and powerful enough to do most things you'd expect from a decent art package*



Personal Paint 7 comes with in-built ARexx scripts that are easily accessed from the tool-bar. The catalogue script, above, should prove to be particularly valuable



Never mind the Pollocks



The program actually includes a huge array of image processing tools, though it's not as fast as you might hope



As usual, Cloanto continues to develop Personal Paints support for more file formats.



Personal Paint includes image processing tools, like this water-colour effect

abled we had no other problems running Personal Paint.

Arguably the biggest addition to this version is the huge expansion to the program's ARexx support. Personal Paint now boasts no fewer than 180 ARexx commands and scripts can be accessed directly from a new icon incorporated within the toolbar itself. This puts batch processing power and a range of new tools at the users finger tips - not bad for £40. Incidentally, the documentation for these ARexx scripts is stored within the scripts themselves, and can be accessed equally easily from the tool bar.

As you'd expect, Cloanto has continued to improve Personal Paint's support for an increasing number of file formats. Version 7 now supports PhotoCD, GIF, BMP, JPEG and 24-bit DataTypes. Regarding the later format, Personal Paint converts 24-bit images down highly efficiently. Furthermore, Photo-CD images can easily be converted to 256 colours and scaled to suit your chosen screen mode.

There is a new plug-in library system that makes it possible to add input/output formats for files, scanners and screens - which basically means you can create libraries to support new formats that may arrive in the future without having to wait for a new upgrade from Cloanto.

In fact, it seems Cloanto is trying to build a certain amount of future proofing into the latest version of Personal Paint. It will be possible to replace critical Amiga blitter and CPU code with a combination of 'virtual blitter' and other logic, thus making it possible to configure version 7 to optimise faster processing power - even Power PC should it ever arrive.

Better still, third-party companies have already made additional tools and support for Personal Paint 7 - for instance, RBM has made the ScanQuix scanner plug-in library available. As new libraries for Input/Output formats become available, Cloanto promises to make them available free of charge at its Web-site at <http://www.cloanto.com/amiga/>.

Of course, Personal Paint is a lot more than a palette-based paint program, admirable

though it is in this respect. There are a surprising number of image processing effects ranging from simple lighten/darken options to applying water-colour or blurring effects to an image. It has to be said that these are rather slower than I'd hope for, but do the job well enough.

Then there's the option to load, playback and work on animations. In Personal Paint it's possible to cut and resize animations as if they were individual frames. The Story Board, an animation editor featuring thumbnailed frames, is more powerful than you might expect in a program of this price.

Screen grabbing is also easily accomplished using Personal Paint and version 7 will now grab any Amiga OS window and transfer it straight onto a brush.

One of the most valuable improvements that has been made to Personal Paint is its increased suitability for Web-page design. Version 7.0 incorporates support PBM professional Internet features like GIF animations. A map editor has been included to develop image maps for you interactive Web pages and the program is better suited than any other Amiga art package to building Web-based designs that combine maximum image quality with a compact size.

## AMAZING AREXX

As has already been mentioned, ARexx support has been vastly improved. Some of these tools may only be of interest to ARexx buffs, but there are scripts provided that produce amazing effects pretty much at the click of a button. Take, for example, the Image Catalogue script, a tool that will automatically take a directory of pictures and generate a thumbnail library of pictures within about a minute. Very handy indeed!

Text manipulation scripts are also accessible from the ARexx button on the tool bar, speedily creating circular or spiralling text effects. There are also a whole host of scripts available for animation work, including Anim-GIF loaders and savers.

Perhaps to no-one's surprise, Cloanto has

given Personal Paint some handy additions here, but if you didn't like it before, version 7 is unlikely to bring about your conversion. For the average Amiga artist it remains the perfect choice - simple, flexible and powerful enough to do most things you'd expect from a decent art package with a number of image processing functions thrown in for good measure.

It's good to see the program being developed at such regular intervals and Cloanto deserves a pat on the back for incorporating particularly useful new features like vastly improved support for Internet design work. The program's power can be vastly increased if you brave the hugely improved ARexx scripts as well, and Cloanto's concerted efforts to allow users to take advantage of future formats and technology is commendable.

My only reservation is that it isn't what a lot of Amiga-based artists are crying out for at the moment. Personal Paint 7 still only works with 8-bit images, limiting you to working with a maximum of 256 colours. As such, it's good, but I'd personally happily pay more if Cloanto can come up with a 24-bit offering.

In the meantime version 7 is encouraging, though, because Personal Paint has improved yet again, and with a price tag of just £40 most of us will be counting our blessings. Well worth the upgrade fee!

AC

## Bottom line

### REQUIREMENTS

RED essential BLACK recommended



Workbench

### PRODUCT DETAILS

|          |                    |
|----------|--------------------|
| Product  | Personal Paint 7.0 |
| Supplier | Digit              |
| Price    | £40.00             |
| Tel      | 01395 270273       |

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# LIGHT ROM 4

## £29.95

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The fully featured World Wide Web browser, IBrowse makes surfing the net with your Amiga a breeze. Supports HTML 1, 2 & 3 as well as Netscape extensions. Caches pages, uses MUI (included) fully compatible with In-To-The-Net. Works with any video card and will support external datatypes for sounds, animations and video.

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ou've yet to get a modem. Perhaps you don't even want one, maybe you reckon there are better things in life and that the whole of the Net community are a sad bunch. OK, don't turn the page, in some respects I actually agree with you. But let's keep things in perspective - swimming against the tide for a valid reason is one thing, but to dismiss the whole Web/Internet thing just for the sake of it, is not so good. To start with, you stand to miss out on one of the most important open text file formatting standards ever devised.

I'm talking, of course, about HTML. As every self-respecting Web user knows it is the standardised 'hypertext markup language' used for creating Web pages. By inserting special symbols (called tags), such as <b> to indicate bold text and <p> to indicate the start of a new paragraph, HTML allows the display layout of what are otherwise just ordinary text files to be defined.

The hypertext label? Don't let that fool you - it just means HTML also allows you to incorporate tags that create logical links to either other parts of the same document, or to another separate document. Click on that link and you immediately move to the marked position - even if it's in another document on a computer system on the other side of the world!

In the Web context of course, HTML files are viewed with a browser (a reader program) that understands the various HTML tags and can therefore display a file in the way the author intended. The browser also provides some high-level communications facilities that enable files to be requested from remote computer systems.

## IDEAL

So sure, in the Web sense HTML is all encompassing. What many people have missed however, is the fact the language is also ideally suited to lesser jobs.

A growing number of programs on the Amiga and other platforms (including the mainframe world) are using HTML for creat-

It's not just Web users who ought to be taking an interest in HTML. As **Paul Overaa** explains the, nigh-on universal acceptance of this markup language has potential benefits for everyone

# HTML For All

ing program documentation, help files and so on. What's more, this is happening despite the fact these platforms already have their own, alternative hypertext languages for such things.

In Unix circles, HTML docs are gaining an increasing foothold and with the example closest to our hearts, namely the Amigaguide system, it's already clear interest is dying as more programmers and manual writers are realising the benefits to be had with HTML.

So why is it happening? Basically because HTML is platform independent. Files created on the Amiga for example, can be read and correctly displayed on a PC or any other computer system that has had an HTML brows-

er/reader program developed for it - pretty much any computer platform.

For multi-platform program developers this is great - a single, platform-independent, help file language for all their products is a Godsend indeed. Similarly, the ability to accurately display a hypertext document file on any computer system regardless of what machine the file was created on has immense benefits for users as well.

Purists (and those perhaps not quite so pure) may well argue that there are a few snags. It's true - HTML is still developing so rapidly that browsers/readers, even the best, have trouble keeping up with the latest extensions.

```
<html>
<head>
<title> Level 3 Page 7 </title>
</head>
<body>
<h2>
Miscellaneous extras</h2>
<ul>
<li><a href="L04P11.htm">Cursor Positioning from ARexx</a></li>
<p>Not exactly a stunning selection of topics I know, but let's face it
things had to start somewhere!</p><ul>
<li><a href="L02P03.htm">Return to page from previous level</a>
<li><a href="L01P01.htm">Return directly to main index page</a>
</li>
</ul>
<hr>
<i><centre>Page last updated
16-Oct-96</centre></i>
<hr>
</body>
</html>
```

All browsers allow you to view the underlying source file of a displayed HTML document

Netscape, a company who produce a popular PC browser, are responsible for creating much of the running at the moment. Almost as many extra Netscape extension tags have been defined as were originally available in the whole of the first official standard for HTML. So yes, things are still changing and there are going to be plenty more improvements in the next few years. That's not too important though - what matters is that the fundamental issues concerning the basic tag arrangements have already been put into place and these are not going to change.

## EASY TAGS

As the HTML bandwagon has started to roll, a whole host of programs have appeared that allow users to create HTML files without knowing the first thing about the various tags embedded in their documents.

It's great - you write the text and, courtesy of a few mouse clicks and menu operations, the software does the rest by throwing in the tags needed to display the text in your chosen way. The snag? Using HTML is a bit like driving a car. Sure, anyone can learn to drive but even after years of driving you'll never understand why you cannot pull away in 4th gear. Learn a little about how a car works however, and such things become obvious very quickly.

From the HTML viewpoint, things are much the same and a little knowledge goes a long, long way. To start with you'll find it surprisingly easy to take a text file and manually insert a few tags that allows the file to be displayed, in very reasonable form, by a browser program - and sometimes it may only take a few minutes to do.

A few short macros written for your word-processor can make the task even easier and each time you create or edit HTML documents in this way you learn that little bit more.

## WHERE DO YOU START?

You don't need a modem in order to get involved with HTML although you do need a Web browser. Depending on the browser you choose you may also need some support software such as AmiTCP in order for the browser to run, even in local mode.

The other thing you require is a text editor and at a pinch, ED would do. All HTML files can be viewed and edited just like ordinary (ASCII) text files (strictly speaking that's what they are). So one way of learning about HTML is to look at HTML documents created by

## HARD WAY

```
<h2><a name="History">MidiPlayer History</a></h2>
<h3>November 92 [version 1.00]</h3>
<p>After a few months of reading the Midi File standard and experimenting with various possible coding approaches, a preliminary Shell version (v 1.00) was created and released so my Midi file parsing ideas could be given some real testing.</p>
<h3>January 94 [version 1.10]</h3>
<p>No unexpected problems had been found to date but I decided to modify the resource allocation method being used (program now uses a stack ADT based procedure). Whilst making these alterations a couple of minor changes were made to the code. Firstly, the delta time delay code was placed in line (rather than being named as a function). Secondly, the
```

code around the 1.3 timer device (<2 usecs) bug was removed as I realised that time delays of this small magnitude would never occur in practice. This version was released as <B>MidiPlayer</B> version 1.10.</p>
<h3>January 94 [version 1.20]</h3>
<p>Shortly after version 1.10 was released I decided to spend some time adding an Intuition interface. This program was released as a Workbench runnable <B>MidiPlayer</B> version 1.20.</p>

**Listing 1: Many of the HTML files you will find are good in the HTML sense, but are physically poorly formatted which can make them difficult to understand, even though it will be perfectly displayed on any Web browser as they are unaffected by format**

other people.

But there is a minor problem here. Most HTML documentation is produced using the utilities we mentioned earlier - the ones that add tags without the user needing to worry about tag details or via a converter program that translates other tag-based hypertext languages into the equivalent HTML form.

Since the final displayed form of an HTML file is completely specified by these tags, rather than the physical layout of the text in the file, these HTML writers normally just throw the text and tags into the file in the easiest way possible (see listing 1 for an example). While this doesn't affect the final displayed layout, it does sometimes make it difficult to make sense of the file if you've

loaded it into a text editor or wordprocessor in order to learn a little HTML yourself.

The way round this is to learn a few basic HTML tags and create some example files yourself - doing it in a way that keeps the HTML stuff easily readable. All that's needed is a bit of common sense, coupled with a few style conventions. The best way of getting some of these under your belt is to take an interest in the various Web-related tutorials that are now a firm mag fixture.

I'm not contemplating any additional HTML tutorials at the moment - although I could be persuaded. My aim, quite simply, was to draw attention to the non-Web/HTML connections for any non-surfers around to prevent anyone missing an important boat.

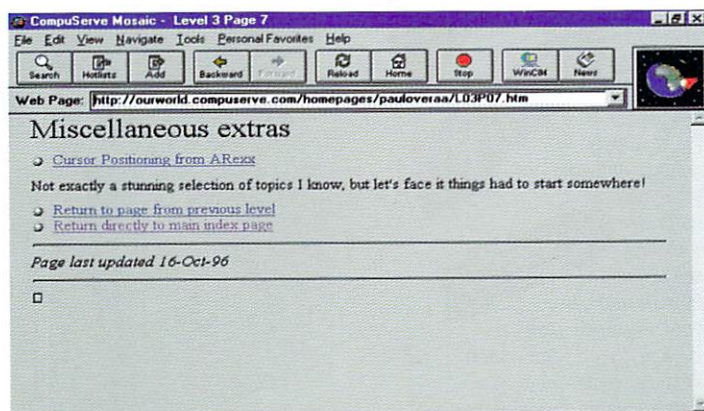
## EASY WAY

```
<h2><a name="History">MidiPlayer History</a></h2>
<h3>November 92 [version 1.00]</h3>
<p>After a few months of reading the Midi File standard, and experimenting with various possible coding approaches a preliminary Shell version (v 1.00) was created and released in order that my Midi file parsing ideas could be given some real testing.</p>
<h3>January 94 [version 1.10]</h3>
<p>No unexpected problems had been found to date but I decided to modify the resource allocation method being used (program now uses a stack ADT based procedure). Whilst making these changes a couple of minor changes were made to the code. Firstly, the delta time
```

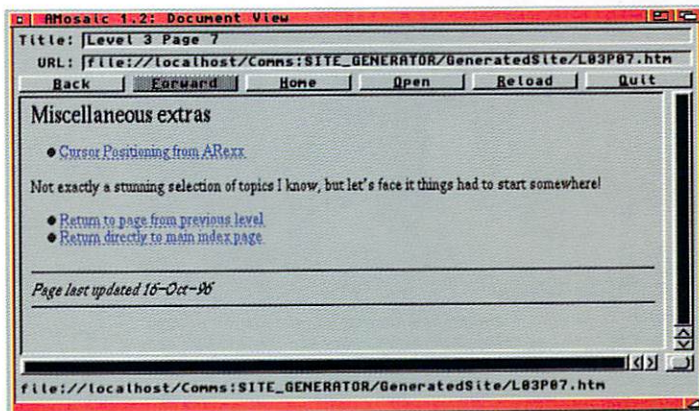
delay code was placed in line (rather than being called as a function). Secondly, the code around the 1.3 timer device (<2 usecs) bug was removed since I realised that time delays of this small magnitude would never occur in practice. This version was released as <B>MidiPlayer</B> version 1.10.</p>

```
<h3>January 94 [version 1.20]</h3>
<p>Shortly after version 1.10 was released I decided to spend some time adding an Intuition interface. This program was released as a Workbench runnable <B>MidiPlayer</B> version 1.20.</p>
```

**Listing 2: The same HTML fragment written in a more easily understandable way**



The great thing about HTML files is the platform independence - they can be interpreted on virtually any other computer platform you could name



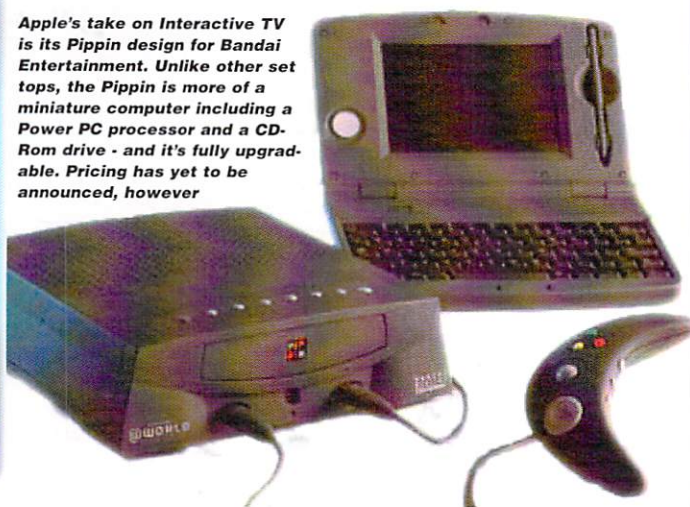
You don't need a Web connection to get into HTML - just use any browser in local mode

# MULTIMEDIA

**Gareth Lofthouse** and **Tina Hackett** take a look at why the Amiga holds the Multimedia Crown

In this month's Multimedia Madness Special we outline the Amiga's prospects at the heart of the revolution in interactive television - plus we take a look at the platform's past success as a multimedia machine. We also examine the software that made it all possible - and a future contender, HiSoft's MediaMagic

Apple's take on Interactive TV is its Pippin design for Bandai Entertainment. Unlike other set tops, the Pippin is more of a miniature computer including a Power PC processor and a CD-Rom drive - and it's fully upgradable. Pricing has yet to be announced, however



## Telly Antics

**D**o you remember multimedia? A funny question, considering multimedia is supposed to be the future for computers. But if a number of recent newspaper articles are to be believed, the multimedia revolution is already a thing of the past.

Take, for instance, a Daily Telegraph report on the problems faced by Omnimedia, one of the top AIM-quoted names in the business. Like many of the companies that found fame on the back of the multimedia hype of the early 90s, it is complaining of sluggish sales, with stock trading at an all-time low.

For the ordinary consumer, the promised land of multimedia has translated into a disappointing reality. Certainly for PC owners, it has meant little more than clumsy CD-based software combined with a sound card. The manufacturers promised all-singing, all-danc-

1997 should see the release of ED, Viscorp's much-vaunted and Amiga-based set top box.

But, as **Gareth Lofthouse** discovered, Viscorp isn't the only company hoping to spark off a mass media boom in interactive TV

ing software, but have usually delivered overpriced 'interactive' books. Hardly surprising if the public get bored or that a number of new media companies have had their fingers burnt.

In reality the story of the demise of multimedia has been greatly exaggerated. CD-Rom may have been over-rated, but other forms of multimedia have continued to evolve, particularly on the Internet - and this is only the beginning. If everyone, from Viscorp to Sony is to be believed, the next stage in the metamorphosis of multimedia will be interactive TV.

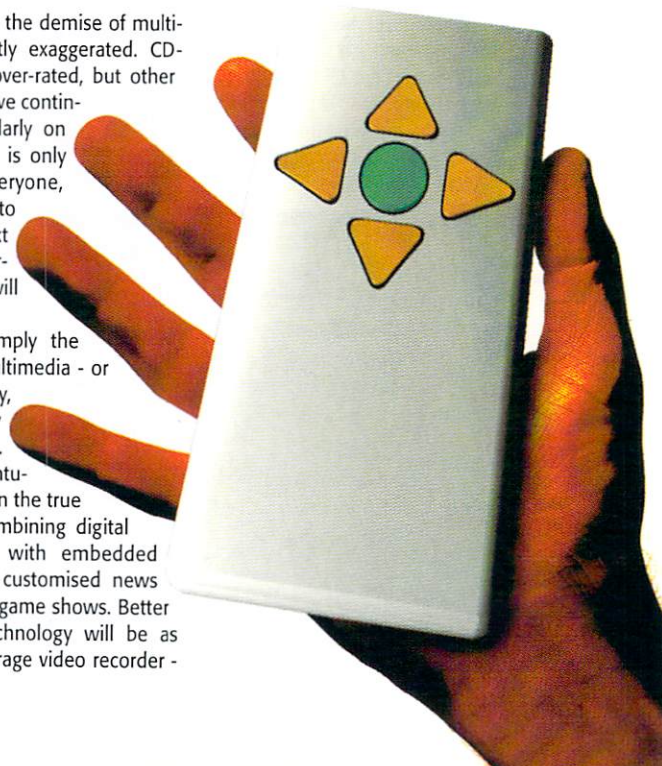
Interactive TV is simply the next logical step for multimedia - or to look at it another way, the revolution is finally about to come of age. Interactive TV will eventually realise multimedia in the true sense of the word, combining digital television, Web-pages with embedded sound and animation, customised news services and interactive game shows. Better still, this wondrous technology will be as easy to use as your average video recorder -

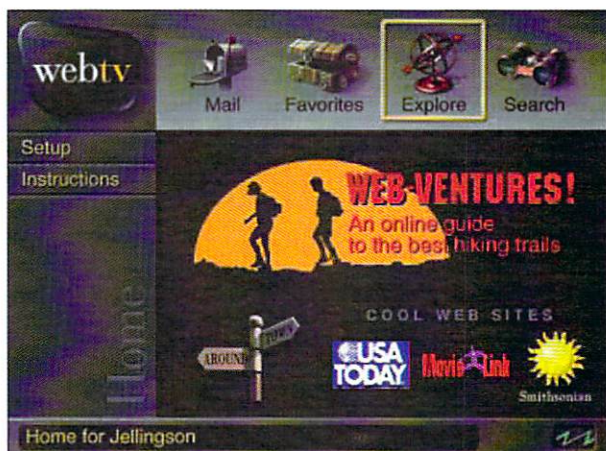
or so the theory goes.

The question for us, however, is what part can the Amiga play in this new development? After all, Commodore core technology



Attractive front-ends are essential for any interactive TV product, but Sega Netlink has taken a different approach. This is one of the Netlink City interfaces which will, according to Sega, make browsing the Net on your TV as easy as playing a video game. The Netlink cartridge, costing just \$199, will plug into Sega Saturns, making it a keen competitor on price. Users will need to spend \$199 dollars on the Saturn itself, though





With the aim of making the Internet as accessible and compelling for consumers as broadcast television is today, Web TV is looking like a formidable contender. A combination of stripped down computer, 33.6k modem and "TV Lens" image enhancement technology, it has already received backing from Sony and Phillips. Web TV Network will also provide a simplified front-end to shield the user from the complexity of the Internet.

hasn't advanced since 1993 and its supporters have never even been properly catered for with CD-Rom multimedia products, let alone Java, Shockwave and other trendy interactive commodities. Surely no-one in their right minds would base interactive TV systems on such an apparently out-moded platform.

Whether ViScorp's management is in its right mind remains to be seen, but that is exactly what they intend to do. With ED, the set top box, it promises to be able to out-perform rival projects while taking advantage of the Amiga architecture's unique economy. Among other things, its box will connect to a standard TV, allowing families to surf the Net, order pay-per-view shows and join in interactive games.

## NO SURPRISE

That the Amiga is being used to mount a challenge in the interactive TV market shouldn't surprise anyone too much. Back when Scala coined the phrase 'Computer Television', the Amiga was at the forefront of the race towards the new hybrid technology. Even now, it retains numerous advantages as a potential core for a set top box.

The fact that the Amiga is a truly multi-tasking computer must rate as one of the highest of these. After all, if you want to watch TV while monitoring incoming calls and searching the Net for news updates, a fully multi-tasking system is surely the logical choice.

Perhaps even more important is the fact that this multi-tasking OS can be compressed into just 2Mbs of RAM. Think of it like this - to become as popular as VCRs, interactive TV has to be cheap like VCRs. RAM is expensive - the less RAM you need, the cheaper it is to produce a set top box.

If ViScorp's fortunes depended on the technology alone, ED would be a hard machine to better. As well as allowing access to the Internet and on-line services such as CompuServe and America Online, there are

plans to make voice chat programs accessible through your TV set.

ViScorp has also drawn on a host of interface designers and technicians with TV-based backgrounds to ensure the machine will work more like a simple household appliance rather than a typical computer. Hence it can be operated via a television remote control, touch sensitive pen and an integrated microphone, as well as the more obvious keyboard.

ED has also been designed with electronic commerce in mind. A credit card reader is built into the casing itself to allow for home shopping and electronic banking.

Combine that with what they call a 'telephony management' system (to monitor incoming calls and flash caller names on-screen) and ViScorp's system sounds rather appealing.

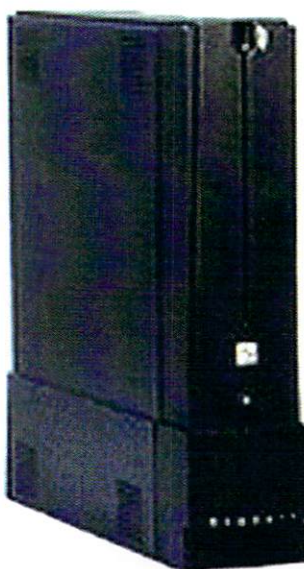
Clearly, however, ViScorp is a small fish compared to some of the companies now developing rival products. The industry believes interactive TV will open up a huge new market. According to the International Data Corporation, a leading market research firm, roughly 22 million consumers will be accessing the Internet using something other than a computer by the year 2000. That puts a lot of spondulicks up for grabs.

That's why everyone from Sony and Phillips to Oracle and Sega are working towards producing their own set-top-boxes. The specifications of their machines vary, but essentially they're based on the same idea as ED. Like ViScorp's machine, they will use the TV as a monitor, they will be as

ViScorp's ED will not only feature Internet-TV connectivity, but also a number of unique features including speaker phone technology and an in-built interactive programme guide with one week of TV programming mapped to the local area. The Amiga OS's economical memory requirements should keep prices down, though a final price has yet to be announced



Remote controls, rather than keyboards will be the normal way of operating most set top boxes



easy to install as a TV cable box and they will automatically access the Internet.

Such is the scale of the predicted market for this new hardware that even Bill Gates is sitting on the fence. He might prefer it if everyone just accessed the superhighway via the PC, but if the set top box takes off he's determined it will run on Microsoft software like everything else. Hence Microsoft's investment in California-based company, WebTV Networks, developers of set top box technology.

Fully aware of this, ViScorp isn't seeking to challenge the big boys on its own. 'ViScorp will not market its boxes on its own name,' explained Communication Manager, Jason Compton. 'ViScorp is a technology holder and licensor, and manufacturers will be able to license ViScorp's technology and build their own set-top boxes.'

## EMERSON

So far the most comprehensive talks regarding this issue have been with Emerson Radio Corporation, a well-known international consumer electronics company. In fact, ViScorp and Emerson signed a letter of intent back in June 96 for an exclusive distribution deal for the ViScorp set top boxes. At the time Eugene Davis, Emerson's President, was impressed not only by the Amiga-based Internet TV products, but by second and third generation prototypes ViScorp was able to show to them.

While other companies seek to sell set top boxes directly to the consumer, ED could also take a different route into your living room. 'ViScorp sees a big market for set top boxes sold to cable or telecom companies for leasing purposes to their customers, Compton says: "Instead of selling a box costing hundreds of pounds to a consumer, they could lease a high-tech cable box from their provider for just a few quid a month."

All of which would sound rather promising, if not for ViScorp's increasingly intractable problems. The acquisition of the Amiga technology was almost completed by early summer, but Escm's collapse made the previous buy-out negotiations void.

Months later, it has become doubtful as to whether ViScorp can afford the acquisition anyway. Now the Amiga set top box's hopes may depend on the willingness of an alternative buyer to re-license the technology to ViScorp. Meanwhile, the likelihood of an early 1997 launch for the Amiga set tops seem to be receding. Unfortunately, Sony, Sega, Apple and the rest won't be holding anything back in the meantime.



Welcome to the Future, a lesser known company set to release a set top box called Net Vision in Spring 1997 for just \$300

## Scala MM400

Still the best multimedia development package available for the Amiga, Scala MM400 enables you to generate professional quality presentations and infotainment for under £300.

The package proved ideal for enhancing home and corporate videos and probably remains unmatched in this price range when it comes to video titling. The software also features one of the most user-friendly and elegant interfaces developed for any platform - making apparently compli-

cated multimedia movies child's play to develop using an affordable home computer.

MM400 pushed an already unmatched product further with the introduction of ScalaType font technology. This allows Compugraphic fonts to be rapidly resized vertically or horizontally. This is aided by the software's support for a Super Hi-Res mode and the addition of enhanced anti-aliasing. AutoKerning for outline fonts removes glaring gaps between letters in title words, allowing for even

more refined titling.

Scala's huge array of wipes also proves that just because you don't have a broadcast editing suite available, doesn't mean you have to produce videos and presentations with clumsy cheap-looking transitions. With MM400, for example, there are spline-based curved fly-ons and offs which can be applied from eight different directions.

The use of Ex's - plug in additional program modules that increase Scala multimedia functionality - is another innovative (not to

say influential) aspect of MM400 and its predecessors. Ex's added support for Midi, still video, VLAB Motion, MPEG file playback and a whole host of other sources for multimedia development.

Basically, Scala set the standard with this product - let's just hope they can be persuaded to continue its development again once the Amiga's circumstances become more settled. Highly recommended if you're even half-serious about multimedia production.

# Amiga triumph

## M.M. EXPERIENCE

This is aimed at users with budgets that won't stretch to the justifiable, but substantial cash, outlay required for Scala products. Optonica's M.M.Experience promised to deliver a multimedia production tool on the cheap - just £40 in fact. It's certainly a lot cheaper than Optonica's previous foray into multimedia, the Interplay CD authoring tool.

As video-titling software, it has to be said that M.M.Experience doesn't get off the starting blocks. There are none of the sophisticated text effects available in Scala MM400 - in fact there isn't even the facility to type text directly on the screen.

That said, you wouldn't expect all the benefits of MM400 in such a drastically cheaper product. MM400 also falls down in a more basic area - that of the Optonica designed interface. Our reviewer found M.M.Experience to be rather awkward to use when it made its appearance in early 1996.

However, with 60 different transitions available, a clever and unique page effect editor and the sheer good value of a functional multimedia tool at this price all go a long way to fully redeeming Experience, despite its faults. If you just want to play around with multimedia for your own enjoyment, it would be silly to overlook this product. Ultimately, however, its long term value will depend on how well it hold its own against HiSoft's affordable new product, MediaMAGIC.

## Tina Hackett and Gareth Lofthouse

look at the products, projects and people that have made the Amiga Multimedia Machine number one

## IMAGEVISION

This is the only serious contender at the moment that could possibly steal Scala's crown for Amiga multimedia. Blittersoft combined a wonderfully simple interface with impressive program power - and all for just £150!

ImageVision's good-looking interface combines a script, tool and icon window. Like HiSoft's MediaMAGIC, scripts are built up with a sequence of drag and drop icons, each representing actions or events. Because of the clearly illustrated icons, it's immediately apparent what form a script will take as it's constructed in the working environment. Because of this, multimedia construction and editing is a matter of swapping round the compositional elements like building blocks - it's that simple.

Organisational tools are also available to make multimedia production an even tidier affair. Group and ungroup functions, for example, allow you to represent a series of icons with a single group icon instead.

There are seven icon types included in ImageVision. Each has different properties that allow users to perform different effects in presentations or organise scripts more neatly. These include slideshow, animation and sound buttons.

It has to be mentioned that ImageVision is still in development and the original release couldn't match Scala MM400 when it came to feature packed productive tools. ImageVision comes with only 12 basic wipes, which is nothing compared to Scala or even M.M.Experience.

On the other hand, of the products presently available, you'd have to say ImageVision looks like the best hope for the future of multimedia production on the Amiga platform. Keep watching for developments.

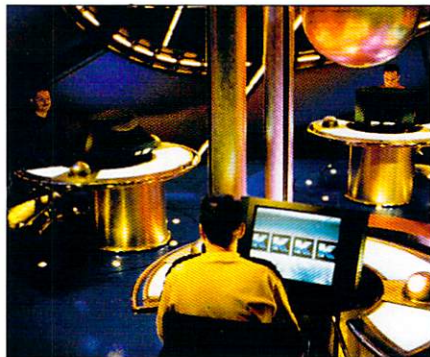
## TV HEROES

### Case Histories

The Amiga has played a huge role in TV multimedia – from designing screen logos to acting as the centre point for a quiz show. Back in September '95 we discovered that hot shot television company, Planet 24, used the Amiga and Lightwave to create the eye-catching graphics for the likes of The Big Breakfast and The Weekend Show.

Go channel hopping and you can also see the Amiga at work on some of Granada's award-winning drama series' like Cracker and Prime Suspect. Behind the scenes, an Amiga is needed whenever a computer screen is shown on TV because of its 50Hz video frame rate (twice the speed of a TV film camera) and its genlock ability which allows multiple computers to be synchronised – normally when a screen is filmed you get a visible flicker.

Quiz show, the Krypton Factor, also benefited from the Amiga for the scoring and control system. Contestants answered questions by pressing on touch screens controlled by an A3000.



Contestants in The Krypton Factor answered questions by pressing on touch-screens controlled by Amigas

phs

## A DAY AT THE MUSEUM

Museums are no longer the sombre grey buildings of old, with dust covering crusty boring exhibits and threatening signs saying "Do Not Touch". They are interactive, bright, colourful places where learning is aided by computers – in particular, the Amiga. One of these was the Imperial War Museum.

We went to visit and we were greeted by two ominous cannons and a rather grand domed shaped building with huge stone pillars adorning the entrance. Inside however, amongst the exhibits of tanks, guns and the usual paraphernalia there were TV screens running Scala's Infocchannel as well as a Scala driven touch screen display. Also we discovered that White Knight Technology's

Broadcaster Elite helped compile the museum's film footage for a mock wartime cinema.

Another museum that benefited from the Amiga's multimedia talents was Eureka – a hands-on learning museum for children. Using a system called In-Video, developed by 70's pop supremo Dean Friedman, children can interact with an exhibit called Dreams. When a child walks in front of a monitor, their image is picked up by a camera and digitised onto the screen. Virtual balloons, for example, float past and the child can "touch" them – the computer picks up on this and pops them.

Those who have visited the London Transport Museum will have seen the Amiga at work. The museum aims to absorb people in a fascinating time warp which tells the story of how people, past and present, travelled round the city. Aided by 65 CD32's and three high-powered Amigas, visitors can read information from various monitors and touch screens dotted around as well as learning about the development of the London Underground from an interactive hypermap. What is particularly stunning is a 1938 train cab simulator where the front window has been replaced by a screen and the visitor gets to control the train as it speeds down the tunnel (all controlled by an A4000).

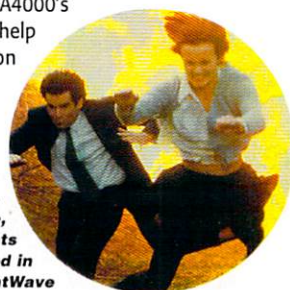


# MULTIMEDIA

## BIG SCREEN BONANZA

As I'm sure most of you know, the Amiga has been used to produce some of the most famous hits of the big screen. One of the most celebrated of all Cinema idols is James Bond and for his most recent escapade, GoldenEye, an Amiga was used to produce some spectacular effects. Take for example the scene where MiG-29's are flying in from all over the place – this was a special effect produced with Lightwave.

Oscar winner, Nick Parks and Aardman Animations created the much loved clay characters, Wallace and Gromit, with the help of an Amiga too. A4000's were used to help the animation process.



The action-packed flick, GoldenEye, had stunts created in LightWave

## EMERGENCY SERVICES

It's not just in the glitzy world of entertainment that the Amiga excels in – it has proved itself to be an invaluable system for the Cleveland Police and in hospitals.

Back in October 1995, the Cleveland Police Force installed an impressive multimedia system in all its stations. The system was designed to provide information on crime procedures and new legislation the officers need to know. It also meant that if there was a photo or security camera footage of a suspect it could be distributed around the whole force on computer in full colour – previously they had to rely on black and white photocopies.

It's a project that has proved itself to be highly successful – the City of London police have followed Cleveland's lead and have installed such a system. Also a number of other Police Forces, local councils and fire fighting departments are awaiting funding decisions after which they too look likely to opt for similar Amiga-based systems.

Hospitals and doctors surgeries also have a practical and cost-effective solution thanks to a project called The Health Channel. Patients waiting in doctor's surgeries can watch informative videos on public health and the surgery's facilities which has been put together on Amigas.

It's a fast and flexible solution that proved invaluable when meningitis broke out in Coventry and warning symptoms and advice had to be given out quickly. Where a surgery needs to edit the video, they can buy an Amiga as well which lets them change the information as they need it – one hospital even uses it to tell patients when to move into the correct departments.

## MULTIMEDIA

**T**here is no doubt that in the past, Amiga users have been spoilt when it came to affordable multimedia packages. To this day, no other platform can offer better value for combining video, sound, animation and text together into a seamless interactive presentation.

Worryingly, the erstwhile champion of Amiga multimedia known as Scala has been rather quiet of late. Understandably it has decided to concentrate on establishing its expertise in the PC market, while new Amiga software updates have been put on a back-burner while the platform's future remains uncertain.

There is, however, good news for those of us awaiting a more modern yet highly affordable multimedia product. HiSoft now plan to release MediaMAGIC early in the new year at the cost of £70 and a sneak look at the software suggests it might just be what we've been waiting for.

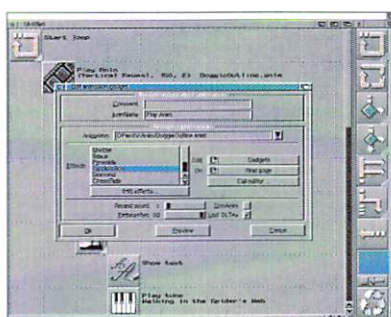
HiSoft promises to deliver a product that will simplify the process of developing interactive multimedia. Presentations in MediaMAGIC are created using a simple, intuitive interface and the software has been designed to give individuals optimum flexibility when developing projects.

As with Scala software, presentations in MediaMAGIC will be represented by a script – which in this case is created using simple symbols. There are symbols representing a wide range of actions and events, allowing for an almost click-and-play approach to multimedia design.

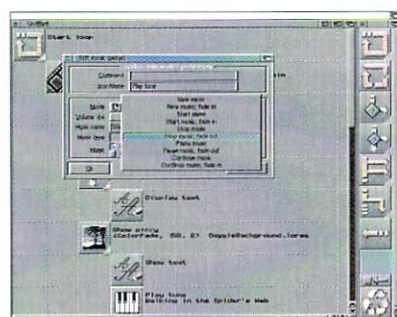
Using these action symbols, for example, it will be possible to create simple slide shows in which pictures are linked by fade and wipe effects. More ambitious users, on the other hand, will be able to develop far more complicated presentations with a combination of the loops, conditional branches and subroutines featured in MediaMAGIC.

The program's interface is essentially based on two windows – a Toolbox window and Work window. It's the Work window, divided up into a grid of squares, which will allow users to create a script and edit the sequence of events. The basic process should be easy enough, since users simply have to drag icons from the toolbox and place them in the Work window from the top downwards, thus creating a sequence of events for their presentation script. As a further plus point, the editor windows will be compatible with graphics cards, allowing you to use high resolutions to increase on-screen work space.

MediaMAGIC promises to be more flexible than a simple sequential list of events, however. A 'Parent-Child' concept has been applied to the



The program will feature several built-in special effects that can be applied to animations, pictures, brushes and text



HiSoft's multimedia maestro will support all the popular sound module formats and IFF-BSVX sample can be faded in and out in time to your pictures and animations

# Magical Presentation

**HiSoft** is set to revitalise accessible multimedia on the Amiga with the imminent release of MediaMAGIC.

icons which will allow you to generate conditional scripts. Conditional scripts are set up using an 'IF' icon (The Parent). Only when the 'IF' conditions are met will the 'Child' sequence of icons (and thus events) be executed. Actually this sounds reminiscent of Blittersoft ImageVision, though whether it works in the same way remains to be seen.

It will also be possible to edit several scripts simultaneously and multitasking is fully supported by the program. In fact, two windows can be used to edit separate scripts at the same time, copying icons from one to the other.

A final point about the editor – it will display thumbnails of the pictures actually within the working environment, allowing users to shift pictures around without confusion.

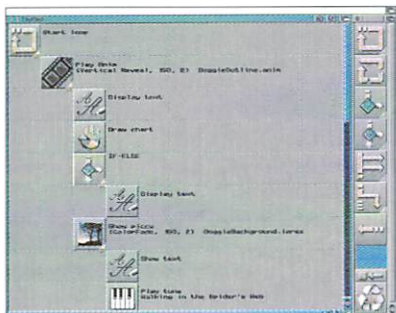
Design flexibility seems to have been paramount in the programmer's mind, with the introduction of options to define both local and global variables for use in each script. Local vari-

ables are available only in certain parts of the script, while global variables are valid for the entire script.

Subroutine modules will also be available allowing users to re-use frequently required sequences in a presentation as conveniently as possible. This should dispense with the need to recreate models or copy them repetitively.

Simple presentations are probably most useful for illustrating business data and information for work colleagues and clients. With this in mind, a chart editor will be available allowing users to generate charts from within MediaMAGIC itself. Line charts, bar charts, pie charts can all be knocked out using a simple interface and there are options to alter colours, positioning and the orientation of a diagram.

All in all, MediaMAGIC is shaping up to be an excellent and affordable multimedia product and one that may provide a viable alternative to Scala MM400 to the Amiga enthusiast.



MediaMAGIC's drag and drop interface means you'll be able to put professional presentations together in a few minutes

## SPECIALISED SUPPORT


One of MediaMAGIC's selling points will be its in-built support for a broad range of file formats, allowing users to include a great range of varied source material for their presentations. MediaMAGIC will load and display the following:

IFF-ILBM data formats, including ILBM-24 (which it converts on-the-fly to HAM-6 or HAM-8 depending on whether the AGA chipset is present).

IFF animations in the Anim-5, Anim-7 and Anim-8 formats

MediaMAGIC also supports 8SVX sound files and common music modules including Soundtracker, Protracker, Noisetracker, Octamed and Octamed Pro.

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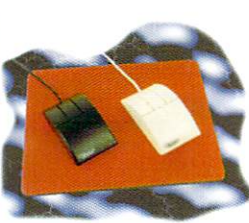
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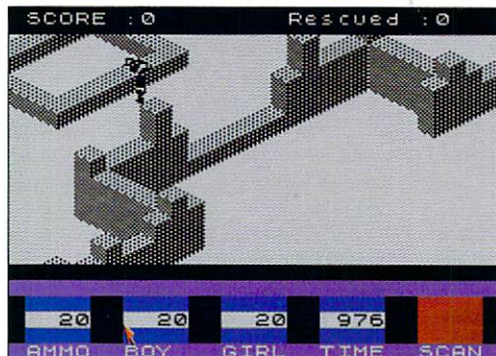


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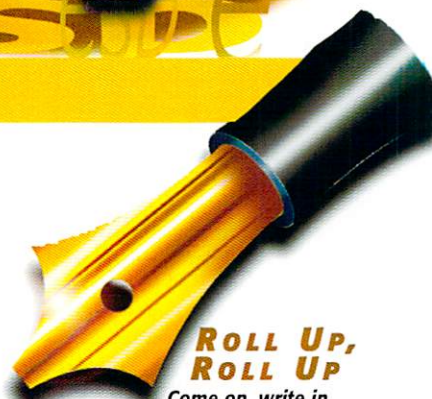
The New Year has inspired many of you to write in. From Spectrum classics to your dream machines, it's all here as **Ezra Surf** discovers....



## GOOD OLD SPECCY DAYS



Remember the good old days of Spectrum games?



**ROLL UP,  
ROLL UP**

Come on, write in you know you want to. The address as per usual is ESP, Amiga Computing, IDG Media, Media House, Adlington Park, Macclesfield, SK10 4NP. Doesn't matter what format you choose - sweaty sock and Tipp-Ex (that's Neil's particular fetish), traditional biro and paper or a disk (saves my fingers) which we can return. Alternatively, E-mail us at [ESP@acomp.demon.co.uk](mailto:ESP@acomp.demon.co.uk). At the moment we're lining up some software goodies for a lucky reader who writes in with the best letter.



I'd like to thank you for a great article about Spectrum classic games in Issue 106. The Spectrum was my first computer and I still love it. Of course, I don't own it today, but I have an emulator and I use it very often. I think you should print more articles about Speccy, for example about emulators, games you recommend or Internet addresses where you can find programs for an emulator.

Please forgive me if you did all this before. Issue 106 was my first of AC and I don't know about previous ones. I live in Poland where foreign magazines are very expensive. For example: Polish magazines cost about 3.5 zlotys and foreign ones 22 zlotys.

As you can see I can't buy foreign mags too often, but I do it at least three times a year. Since December '91 I was buying Amiga Action but when it became very thin (and still expensive) I started to look for another Amiga mag. Now I buy Amiga Format and Amiga Computing. I won't tell you which is better because I like both of them.

I'd like to tell you something about the Amiga situation here in Poland. Amiga is still very popular in my country. There are thousands of Amigas in Polish homes. National and local TVs use them as great graphic machines. I think that the standard Polish Amiga is an A1200 (2Mb RAM, no HDD) There are of course, better configurations (like A1200, 6Mb RAM, HDD, CPU 030) and unfortunately many old A500s

Our software firms produce many programs. We've got Polish word-processors, painting programs or music utils. We have also a lot of games like: adventures, strategy, shoot-'em-ups, beat-'em-ups, platform, Doom clones or even pinball games. Unfortunately, many of them are AMOS-based rubbish, but there are

real gems too.

At the moment we have only two Amiga-only magazines. First is about 'everything': hardware, software, games utils etc. Second is about games only. There are a few more mags which print articles about Amiga but they aren't for Amiga users only (but also for PC and consoles). I couldn't forget about Polish demo scene which is very large and active. There are many scene parties and the biggest is Intel Outside in Warsaw.

Piotr Szymanski  
Poland



**Wow, we don't get many letters from over in Poland! It's interesting to hear your comments on the current Amiga**

situation over there. It would be good to get hold of some Polish software for us to review here - we've seen some interesting game demos but can never get hold of the full releases.

So you used to buy Amiga Action? Well, now you get it for free inside Amiga Computing - what more could you ask for? Are we your favourite magazine now? We must be surely...

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So at the moment all we need to know is "Would you be Interested?". It won't happen if you're not. You're not committing to anything - all we need to get is a feel for the number of people who'd like such a service. Expected cost for such a subscription could be

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## NEW AMIGA HOPES



Several of your readers have been writing in saying what they think the new Amiga should be like, so I thought I would give it a go. Here are the main points it should include.

**Big Box** – The new Amiga must be a big box one. People are switching to PCs in big boxes so I do not think anyone will be put off by this. A CD-ROM and SCSI hard disk must be included as standard. Different sizes and speeds depending on the customer's requirements.

**Graphics** – It must still contain old chipsets (OCS, ECS and AGA) for backward compatibility but also have an improved one. It could have 32 or 64-bit palette and have bitplane and byte per pixel graphics – the latter is a must now. Also it could have some special chips in it to deal specifically with vectors and sprites thus beating PCs and competing with the best consoles (Playstation etc.) The hi-res modes could be improved and must not flicker on any monitor. This could mean Workbench could now look as good as Windows – the only bad thing about it at the moment.

**Sound** – Ditch the four channels. We

need at least 16-bit sound now and a minimum of 16 channels. The sound should be up there with reasonably good keyboards/synthesisers. Midi ports should be included as standard, at least two ins and outs and one thru. Also have a built in sampler directly connected to the CD-ROM so samples from CD can be obtained easily. A separate phono/aux socket should also be included for tape etc. sampling.

**Modem** – As it is the '90s and everything has a web site and email address now, an internal fax/modem must be incorporated. Workbench should have a browser and mail program as standard.

**Memory** – 8Mb is about the lowest a PC can have now so it should be the same here. Chip mem should be expanded to at least 16Mb. The motherboard could have different sockets so you could expand either your chip or fast ram.

**Kickstart** – As a hard disk will be as standard, Kickstart could be on this and loaded into memory on initial boot-up. This will enable upgrades to be given away on floppy disk and not expensive chips. You could have several Kickstarts on the one drive and you could choose which to load up on bootup. This would help compatibility problems.

**Processor** – Now here's the interesting bit. You would have a separate board containing many sockets in which you could insert various processors. This would also help degrading the machine to run old software. You could have a 68060, 68030 and 68000 all on the same board for example, and you could select which to use on booting. This alongside the Kickstarts should eliminate most problems as you could turn the machine into a basic 1.3 A500.

You could take the old processor out of your old machine and have it in the same box instead of having to set up your old Amiga whenever you want to play an old game which only loads on an A500. Oh also the machine should contain a Pentium processor. yes, I know it's bad but let's live in the real world now. A plain Amiga will not sell no matter how good it is, but a hybrid – now you are talking.

All the old enthusiasts who had to ditch their Amiga and buy a PC can now return and enjoy the benefits of the Amiga. Workbench could be enhanced so Windows can multitask in the background. You could click a Windows icon on the WB screen so you could go and play F1GP but have an Amiga rendering an Imagine graphic in the background. It

## MONEY MATTERS



In replying to many of the letters published in your mag you have often asked 'how much are you all willing to pay for an Amiga?' For example, in issue 99 (letter from Jeff Rampe), you continued with the statement, 'I would rather the Amiga continue as a cheap, but good quality hobbyist's machine, rather than ramping the cost up to beyond PC or Mac levels.'

I agree that CD-Rom drives and big hard drives are expensive, but I have been looking through the ads in *Amiga Computing* with a view to upgrading my A1200. As with most people my funds are limited, and so getting the best deal is of the utmost importance.

The cost of the components I intended to buy totalled about £750, and I was just starting to get the cash together, when a friend pointed out that for that sort of money I could build a pretty good PC. This started me comparing prices, and after looking at the price of PC components, I came to the conclusion that Amiga owners are paying through the nose for their equipment.

I am very pleased to see that more than one company who advertise in your mag are now able to offer 4Mb simms for under £40, which must be good news for the Amiga, but I feel that this has been too long in coming.

However, there is still plenty of ground to be made up, and I feel that hard drives and CD-Roms must be very similar in construction for both machines, so why do we have to pay so much more for ours?

I don't believe that Amiga equipment is so special that it can command such a high price, and can only assume that same third party suppliers are just milking Amiga users for all they can get. I noticed recently that new tower cases are on sale for the A1200, but at what

price? £180 with no power supply unit, when for the PC, £55 with a PSU.

I realise that an A1200 tower is a different animal to a PC tower, but the point I am trying to make is that if a PC tower with a 230W PSU costs £55 why do we have to pay £60 just for a 230W PSU? This is bad news for our cherished machine, and eventually users will start to buy PCs for their ease and cheap expandability alone.

Looking at it another way, for anybody starting from scratch, it is now possible to pick up a Pentium-100 system for £800. To build an Amiga up to any sort of comparable standard, you can add my £750 to the cost of an A1200 (£300) and a good monitor (£300) and you end up with a bill for £1,350, which can hardly be called a 'cheap hobbyists' machine'.

The fault probably doesn't lie with third party suppliers, and I feel that Amiga Technologies, rather than bumping up the price by selling the machines with a large software bundle – most of which many users probably don't want – should have offered a machine only option at a lower price, leaving the customer to buy such software as he feels he needs.

This you will no doubt agree with, if you take note of the number of letters you publish from users recommending all manner of software to be packaged with new machines. Surely the best way is to put large numbers of machines in circulation, and so given software houses greater incentive to write more and better software for them.

This brings me to my third grumble, software. Although the Amiga is well supported in many fields, many areas of computer work are poorly covered. Surely the wider the range of uses that the Amiga can be put to, the more people are likely to take the machine seriously.

As an example, one of my other interests is astronomy, and apart from a couple of very good astronomy titles, there is for the Amiga that is any good for me in this field, certainly not to the extent that PCs are supported.

So, to end what has turned out to be rather a long moan, I have to say this.

Wake up AT, the PC has come a long way recently and your machine just isn't that special these days. Third party suppliers get serious, Amiga users are not idiots you know, and we won't stand for having to pay over the top prices for our equipment.

Software houses get writing, there are a lot of users who want to do more than just play games or do a bit of desktop publishing, so spread your net a bit, and you never know who you will win over to the Amiga.

I am very fond of my Amiga, and would be unhappy to see it lost for good, but I am sure that if anything is going to kill off this machine, it will be the high cost of putting together a power machine, and the lack of varied support.

The Amiga may be a different animal, but it still has to be competitive with other machines when it comes to price, or new users will go straight to the PC market without even knowing what they could have had.

On a happier note, I don't intend to say all that grovelly stuff about how good your mag is, as no doubt you're getting sick of hearing that sort of thing by now, but I will say that I shall still be renewing my subscription to *Amiga Computing*, and do not intend to sell my A1200 quite yet. However I might not be upgrading it to the extent that I originally intended, as I feel that a new PC will offer better value for money, and a far wider choice of software. Let's hope somebody takes note, as I'm sure I'm not alone in my views.

Colin Reeves, Lincs.

would not slow down as they will use the two separate processors or even a third to control the multi-tasking.

The Amiga OS could also be intelligent so if a PC CD-ROM was inserted and the program icon clicked on Workbench, it would automatically switch to PC mode. It would be like having all your programs whatever the format on the same operating system. Computer novices would not be able to tell they were using two different systems. How's that for user-friendly!

**Price** – A Pentium PC and the best Amiga ever all in one box – well, I for one would not hesitate in parting with at least three grand!

You may think some of my ideas are a bit far-fetched but let's be honest, the current Amiga cannot survive as it is. It needs a complete facelift and more to help it. The only way it will survive is to turn it into the ultimate machine.

It must also be advertised as a PC with all the benefits of an Amiga to the PC users. Also some killer software should be written. Get a games company to write an amazing game like F1GP2, Wipeout or Doom, a music specialist to write a midi/sampler/sequencing package in one, a graphics program that does everything that DPaint, Image FX etc. do

in one and any other top of the range programs.

Give Workbench a tidy up by making it run in a better screen mode and more colours as standard and try and do to Microsoft what it did to us. Also on the subject of advertising, the biggest mistake Commodore did was ditching the Chelsea sponsorship. Look who's wearing those shirts now. The new Amiga owners (whoever it is now) should try their hardest to get the Amiga name onto the shirts of the world's greatest players like Gullit, Vialli, Zola and Scott Minto.

Gideon Cresswell  
Kent



**Well, we can all dream. We just need a company with plenty of cash who will develop such a system. The idea sounds good to me and I'm sure to a lot of people – I think we'd still have to persuade the Gates Worshippers the benefits of such a system. In the meantime though, the Siamese System provides a pretty good solution. Other than that – we'll just have to wait and see what the third party development companies come up with in the way of Power-PCs.**

## ADVERTISING STANDARDS



I cannot hide by joy that, at last, the games industry looks like it is going to do something about the offensive and frankly sick trend in games advertising that has emerged in recent months.

It really annoys me that, because Playstation games manufacturers are trying to make their products sexy and 'ungeeky' they are attempting to show the games as being slightly subversive by using dodgy adverts. Just who are these adverts aimed at, the Playstations perfect customers, twentysomething year old lads who spend most of their time in the pub and have too much money to spend? Why else would your adverts show Jo Guest using a Battlecruiser box to cover her privates, insulting Germans (and the rest of Europe) or extolling the virtues of joyriding?

Would we put up with this sort of advertising for anything other product. I believe that we would not. Joyriders recommending the Golf GTI? I don't think so.

These games adverts may appeal to the drunken yob with too much money, but to the rest of the population they are just insensitive, tacky and indecent. Is buying computer games still considered so sad as to justify dressing them up as in your face designer accessort for the designer yob. ELSPA, get your act together and do something about these childish and insulting adverts.

Bob Innes, Halifax



**Have you calmed down yet? You are forgetting one basic thing. We are privileged to live in a democracy where people can say what they like, and not have what they say or do inhibited by unnecessary censorship. Be thankful for this. What you are getting riled about is something which when put in its proper context is laughably trivial.**

I will agree with your point that the ads for many new games are pretty childish and almost pretentiously in-your-face. However, having said that most of them are just a laugh. Take the advertising for 'Command and Conquer: Red Alert'. One of the posters shows various photographs of different Europeans in a variety of national dress with the captions 'Europeans; don't you just hate them?'. Agreed, the advert could easily be construed as being insulting, but it is still harmless and really takes the mickey more out of British xenophobia rather than Europeans. As much as anything I think its an issue that the games industry will sort out for itself. Once they realise that this sort of advertising is really not much more successful than any other they'll move onto some other ploy.

Some things we do need to be protected from, but on this level a ban or the like would be ridiculous. Ban guns, ban hard core porn, but don't ban adverts. Censorship is not, and never will be the answer.

## CYBERCAFE AND CAKES



I couldn't agree more with Hugh Poynton's comments on Cybercafes (Comment page, Christmas issue). There are so many people that think the Internet is 'just so cool' and that hanging around Cybercafes, being Cyberpunks is the "In" thing – I mean get a life!

In principle the Cybercafe is a good idea – it's like going to an interactive library in one sense but also sociable in that you can talk to people on the net from all over the world. A bar or a cafe is traditionally somewhere you can go to be sociable – it would be a shame if this was ruined by the addition of a computer.

It's like when TVs were put into pubs. If you put some kind of soap opera on the box, people will just sit gormlessly and watch this – however, if a football match is on it can involve everyone and become an entertaining but still sociable pastime. I'm sure you could do the same with the Internet in a cafe. It can become the focal point of a bar or whatever without putting people into their own little worlds of Cybersurfing.

However, what I would like to see is Internet access offered a little cheaper. I believe that the Internet should be available to everyone – not just those who can afford computers and online connections.

This would attract a lot more people and then maybe this "Communications Revolution" could be just that and involve the whole of society.

Martin Prentice, Glasgow



**I agree – maybe there are Cybercafes out there that offer reduced rates at off-peak times – I know quite a few that offer concessionary rates. However it would be great if maybe they could have an open night where everyone could pop along for a cheap beer and a browse on the Web just so they can see what all the fuss is about. If anyone hears of such an event please let us know.**

In the meantime urge your Cybercafe to put on some sociable events – maybe live debates with other cafes or on-line games tournaments – and who knows what else with a little imagination!



*If you prefer, you can send us your letter via Email. Simply point your mailer to: [ESP@acomp.demon.co.uk](mailto:ESP@acomp.demon.co.uk). You could even send it in on a disk – it makes our lives easier too. Someone has to type this lot in you know!*

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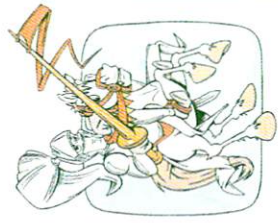
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## AMOS TROUBLES



I have owned an A1200 for the past two and a half years and have recently added an internal hard drive and a Hawk RAM board. I am the father of three children so I decided to buy some educational software.

I chose 10 programs from the 10 out of 10 and ADI range. I found the 10 out of 10 programs crashed after about an hour of use while the ADI programs ran fine. I also had problems using Easy AMOS and Mini Office, both of which crashed after about an hour of use.

When the RAM board was fitted the problem became worse. The above program would only run for five minutes and certain 10 out of 10 programs would not work at all. I have no problems with programs like DPaint, Wordworth and Final Writer, these can be left on all day and do not falter.

*M. Roberts, Hull*



I hate to say this, but as far as I know there is nothing you can do. There seems to be a general problem with certain AMOS programs and AMOS itself with Amigas that have the AGA chipset. This results in the program crashing if the computer has been on after a certain amount of time. When you add extra memory this problem is exasperated and results in the program crashing almost straight away.

About the only thing I can suggest is you try turning the cache off in the early startup menu, accessed by holding both the mouse keys down when you reset the machine. As far as I remember this does not have an effect but may help with the 10 out of 10 and ADI programs. Basically if you want to use these programs you will have to remove your memory expansion.

## CABLE CAPERS



I bought an Amiga Technologies 1200 with a 170mb hard drive six months ago for myself, my husband and son. I have been very impressed with it so far, but I really need your help with a problem.

I have bought a bare tower from ICS with a 220W PSU, dual device and CD-ROM. After opening the computer case and disconnecting the internal 2.5" hard drive so as to house it in the tower I realised the cable I have is for a CD-ROM and 3.5" hard drive.

Is there any way I can get a cable that lets me use my 2.5" hard drive internally in the

A1200 or tower as well as the CD-ROM. I appreciate any help with our problem.

*L Wylie, Scotland.*



There is no reason you should not be able to hook up your drive, it is just a matter of getting the right cable. This is where any possible problems lie. If you want to keep the hard drive internal to the A1200 then you need a 2.5" IDE cable with two 2.5" inch connectors and a single 3.5" connector to link it up to the tower. You will have to contact ICS - they should be able to sort you out with the correct set of cables.

## POP, THERE'S YOUR MAIL



Regarding you saying that "If you are using an Internet account with an SMTP mail server you are better off sticking with AmiTCP, at the moment anyway. As you would have no way to retrieve your mail, unless someone out there knows different."

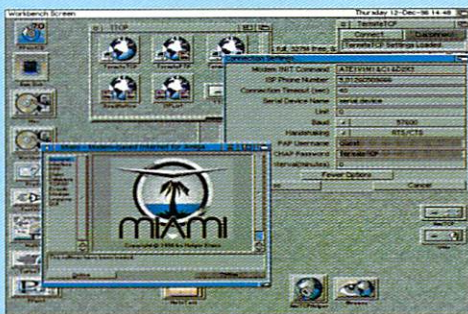
Well, I use TerminateTCP and have no problem receiving my mail - that is what mail programs are for. I currently have 2 mail programs: AEmail and Yam 1.33 and have no problems receiving or sending mail with either one. Don't you also need a mail program for AmiTCP to be able to get and receive mail?

*Knut Koen, kkoen@flash.net*



Does your ISP have a POP or a SMTP mail server? With a SMTP server the mail would normally be automatically downloaded to your machine by a daemon running in the background, which neither TerminateTCP or Miami currently have although there is no reason why they could not. With a POP mail server you would normally use your mail package, Yam is a very good example, to

fetch the mail off the mail server. Now-a-days just about all ISPs do use POP mail servers, the only reason it is a bit of a pain in Britain is that Demon, the largest ISP, use to only offer SMTP mail but now have finally got around to providing a beta test POP server who's address is [sdps.demon.co.uk](mailto:sdps.demon.co.uk). So finally if you have had enough of AmiTCP Amiga Demon users can make the switch.



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## FAILING 040s



Since buying recently a 40Mhz Apollo 1240 accelerator I have been dogged by certain programs that ran perfectly before hand, but now blankly refuse to run.

I have installed the 68040 library that comes with the board but this does not seem to have made any difference. I have noticed however, that if I start my machine with certain public domain CDs the programs I have problems with run fine.

Having used SnoopDOS to see what these programs are doing, it seems they are failing when they try to load certain maths libraries. Having checked the versions on my machine against the ones on the CDs it seems that the ones I have are the more recent, so what is going on?

*D. Chumly, Averton*



There are three things you can do to try and get rid of this problem. Any programs written in the last four or five years should have no problem running on the 68040 processor.

The first step you already have done - making sure you have the 68040.library copied to your libs drawer. This patches various parts of the operating system, mainly to do with math operations, and avoids certain problems associated with the 040's FPU.

Secondly, make sure you have the latest version of Setpatch, more recent versions included additional patches that make the maths libraries work correctly with the 040. The easiest way to check is - once Workbench has loaded, open a Shell and type Setpatch. When you hit return a list of all the patches should appear, if this does not include 68040 support code loaded then you need to get hold of a newer version that adds this 040 support. The latest official version that I know of is 40.16 and is the one you should try to get.

If this fails I would try replacing your maths libraries with the original ones from the Workbench disk, I'm sure you have tucked these away in a safe place for just such an occasion. It may seem odd doing this if you have more recent versions, but you never know the new version could have introduced a new bug or they may just appear to be incompatible when programs come to load them.

## I'M WRONG, AGAIN

? I recently bought your December issue and in the ACAS section of your magazine I found an article that caught my eye: Snapy Upgrades. I then began to read the questions that Rob Daviau from Toronto had sent you. Once I read your reply, I realised you were wrong on one of the answers!

It's regarding question number 3. The CD32 has the same startup options as a Amiga 1200. Yes, you can select NTSC or PAL as well as the original chipset.

I know this because I have a CD32 and have done it. I also know that the CD32, like any Amiga, can not operate without ROM chips and since these boot options are part of 3.0 ROMs and up, that would mean the features are going to be there!

On another point I have a A1200 with a Blizzard 1260 board. For some reason when I move Icons around, resize windows or other intense mouse functions on the Workbench screen, my computer tends to freeze up. I am still trying to figure out why. I thought it was a heat problem so I put on a fan but it still happens.

I don't think it's the CIA because I have tried doing the same thing on after booting up with a Workbench disk and it does not seem to crash, do

you know what is going on? Could I have a bad library or some PD program messing up something? If you know anything please tell me!

Finally, I recently lost DFO so I am forced to use an External drive. How do I make DF1 so it can boot games and uncompress DMS files? Thanks for taking the time to read my letter. If this goes well and you correct yourself, I plan to write many more letters!

Tim Favro, Seattle

darkman@planet.hughestechn.com



Oh, erm, I should have tried the other joystick port as well sorry Rob. I assumed the mouse port was port one. It however does not hold that the early startup had to be in the CD32 ROM, but there would be little point in removing it.

With regard to the crashing problem, firstly make sure you have copied across the replacement libraries that came with your 1260 board – if you don't this makes your Amiga crash in the way you describe. If you have done this and the crashes are still happening you can try renaming your current Libs drawer to Libs.old and copy the Libs drawer from your original

Workbench floppy disk to your Workbench partition. If you now restart your machine you will be able to tell either way if it is a library file causing you problems.

Another possible way of doing this is, at the start of your startup-sequence, assign the Libs: Devs: and L: directories over to your original Workbench floppy, something like this;

```
assign >NIL: Libs: DFO:Libs
assign >NIL: Devs: DFO:Devs
assign >NIL: L: DFO:L
```

When you reset your machine it will use the original files on your Workbench floppy. If everything works fine the problem is to do with one of the files in these directories. By removing an assign at a time you could pin point which is to blame.

It would also be a good time to see if the cause is any PD programs you have installed either in the WBStartup drawer or in your user-startup. This is when the program WBStartup+ comes in handy. If your machine works correctly using the original Workbench disk, this would normally suggest the problem is to do with software installed on your system.

As for your last problem try this: In your

## SEEKING FMV

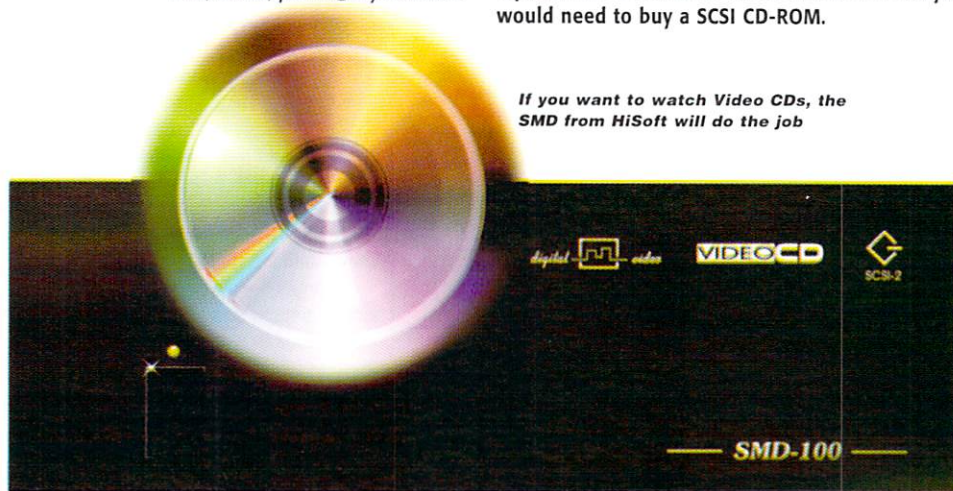
? I own an A4000, A1200/030-50 and a CD32. Apart from using the CD32 to play the odd music CD, I would like to obtain an FMV module to utilise it for Video CDs as well. Any idea where I could get hold of one of these please?

Paul, Malta, pacas@keyworld.net



Unfortunately I doubt very much there are any new ones around for sale. Very few were made in the first place and as Escom did not produce any, I would think your best bet is to try and pick one up second hand. An alternative would be the Squirrel MPEG box from HiSoft but to use this you would need to buy a SCSI CD-ROM.

If you want to watch Video CDs, the SMD from HiSoft will do the job



## JUST A QUICKIE

I just have a few quick question I hope you could answer. Are we ever going to see Workbench 3.2 that came with the Walker and if so what are the changes? Is TFX ever going to appear on the Amiga and do you know if Mortal Combat 2 can be installed on my A4000?

Don.K.Boyd, Horrich

Quick questions deserve quick answers, so here we go. First off we will not be seeing Workbench 3.2 any time soon, and even if we did there would be

little point as the only changes were added support for the new features on the Walker.

I doubt TFX will ever see the light of day, even though it is 95% finished DiD seem to have no wish to put any more money into it. Mortal Combat 2 is on none DOS disks so cannot be installed onto your hard drive, but there is a hard drive installer on Aminet called mkiihd.lha either get an AminetCD or contact a PD house.

## GOOD OLD A5

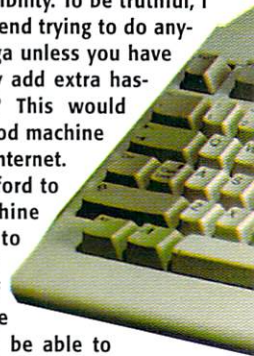
? How can I update my A500 so I can surf the net? What kind of modem do I need and how much more memory do I need – currently I only have 1Mb? Should I purchase the AGA chipset and can I use my TV with it, or do I have to buy a monitor? Should I buy a better Amiga? (I am working on a very small budget)

Olli Mankonen, olman@freenet.hut.fi



Realistically, you should upgrade to a new machine as you are asking quite a lot from your old A500. The best solution would be to get an A1200 and if you can afford it either a RAM upgrade or even better, an accelerator card with extra memory. On top of this would be a hard drive which gives you infinitely more flexibility. To be truthful, I would not recommend trying to do anything on your Amiga unless you have a hard drive – why add extra hassles to your life? This would make for a very good machine to connect to the Internet.

If you cannot afford to dump your machine you will have to upgrade your A500 to at least 2Mb of memory. If you have an A500+ you will be able to get away with using a trapdoor expansion. You can, in theory, use just this configuration. You are however, going to be very limited in the software and speed that you connect to the Internet and it



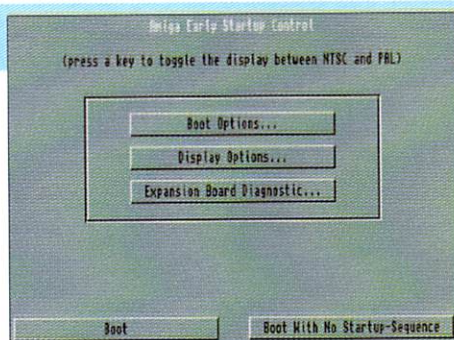
startup-sequence add this line just after the Setpatch command:

```
assign >NIL: DF0: dismount
```

This removes the DF0 device from the operating system's list of devices. Next you need to create a DOSDriver. For this you need a text editor, into which you should type the following:

```
Device = trackdisk.device
Unit = 1
Flags = 0
Surfaces = 2
BlockSize = 512
BlocksPerTrack = 12
Reserved = 2
Interleave = 0
LowCyl = 0
HighCyl = 79
Buffers = 5
BufMemType = 0
StackSize = 600
Priority = 10
GlobVec = -1
DosType = 0x44f5301
```

After typing this in, all that is save it off to the Devs:DOSDrivers drawer and call it DF0. You have just created a DOSDriver that describes a floppy disk drive. This 'new' drive will be called



The early startup menu gives you control over some of the hardware parts of your Amiga

DF0 but when accessed uses the external or DF1 drive. This was set by making the Unit part of the DOSDriver equal to one. This will allow DOS based programs to access DF1 as though it is the internal drive.

As for games, things are a little more complicated as some are hard coded to only use the internal drive. Since Workbench 2 you have been able to boot with external disk drives, you just have to have a disk in the drive. The other way is to go to that early startup menu by holding down both the mouse keys and select DF1 as the boot device, but if a game wants to specifically use the internal drive then there nothing you can do about it.

## Jargon box

**68040** - On of the latest processors in Motorola's 680xOrange. It runs up to 40Mhz, has a built in FPU, MMU and had a 4K copy back cache which helps to greatly increase processor performance

**POP** - A protocol designed to allow single user hosts to read e-mail from a server

**SMTP** - Used to transfer e-mail between computers. The SMTP dialog usually happens in the background under the control of the message transport system

**Library** - Part of the Amiga operating system, libraries allow AmigaDOS to be extendible, so if you want to add new functions you just add new libraries

**AGA** - Advanced Graphic Array, the custom chipset found in the A1200 and A4000. It gave the Amiga the ability to display 8 bit colour from a 24 bit palette

**FPU** - Floating Point Unit, a specialised chip or part of a chip that is dedicated to calculating Floating Point equations. Floating point numbers allow computers to store very large and very small numbers, which they could not do easily otherwise

**MMU** - A hardware device used to support virtual memory and paging by translating virtual addresses into physical addresses. This means hard drive space can be used as memory to store program code and data

## PRINTER DRIVER

Where do I find a print driver for a HP Deskjet 540?

Tim Hamel, [Thameler@AOL.com](mailto:Thameler@AOL.com)

Workbench comes with a generic Deskjet print driver that works with all the Hewlett Packard Deskjet range of printers and even supports the colour modes of the 550C and 560C. Having said that, the quality is not particularly good and programs such as Studio II and TurboPrint do a much better job. You should find it on the Storage disk, just drag it over to the Devs/Printers drawer and then select the printer in the Workbench printer preferences.

will not be much fun to use.

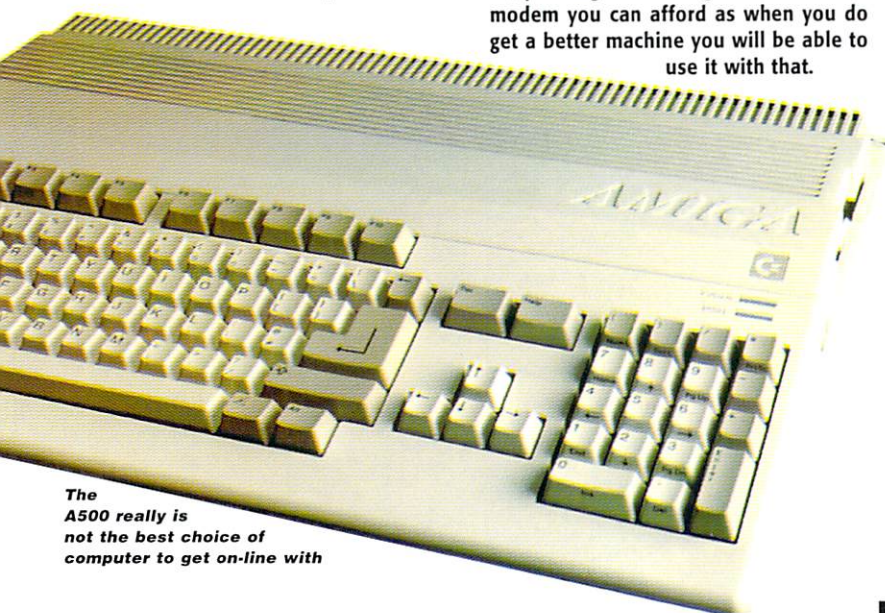
If you are going to stick with your A500 the only software available for such a low specification machine is TermiteTCP. This can be run from floppy and will work within 2Mb of memory. Even though you will be pretty limited to what Internet software you can use and you can forget about any of the new Web browsers, though you would still be able to use ALynx which is a text only browser.

To take advantage of the new Internet software and new Amiga programs in general you need at least a 4Mb machine and a hard drive. AmiTCP requires a hard

drive and Miami uses the Magic User Interface as do many other programs, which due to its size, needs a hard drive. Just to go back over what I have said, this small table outlines what software you need for which machine:

|              |                   |
|--------------|-------------------|
| A500 2Mb     | TermiteTCP        |
| A1200 +HD    | TermiteTCP/AmiTCP |
| A1200HD 4Mb+ | Anything you want |

On the modem side of things - again, using an A500 you will be limiting yourself as both the A500's processor and serial port will struggle to keep up with the faster modems now available. Even so, you might as well go for the fastest modem you can afford as when you do get a better machine you will be able to use it with that.



The A500 really is not the best choice of computer to get on-line with



Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your software or hardware to behave in the correct manner?

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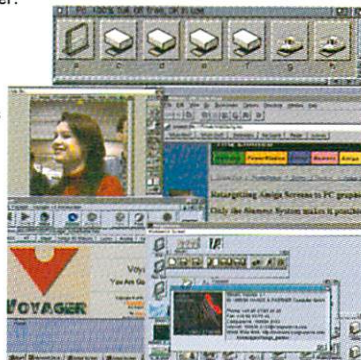
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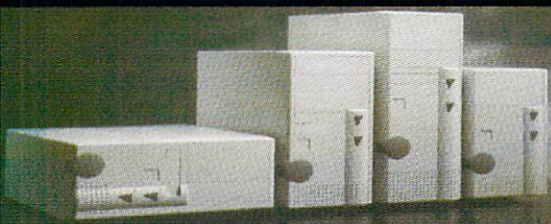
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**A**s a newcomer to C there are two main areas to contend with. Firstly, there's the inevitable hurdle of learning the rules of the language, finding out what the language does (and does not) allow. Secondly it's necessary to get to grips with the large number of system functions present in the Amiga libraries. The first area is reasonably simple because C is a small language that's easy to understand.

The program shown in Listing 1 is about the simplest C code that can be written and makes an ideal starting point for our travels. The first line, some text (the program name in this instance) between /\* and \*/ markers is a comment. Comments can be placed anywhere in a program and the compiler will simply ignore them.

The next line... #include tells the compiler to include a file called stdio.h. This is a header file that is provided with all C compilers. While it's a line you'll use in many, if not all, your C programs, you do not (in your early C days) need to worry about the actual contents of this file.

Following this comes the reference, main(), and this represents a function (the equivalent to the subroutines and procedures found in other languages). The main() function has a special purpose - it tells the compiler where program execution starts and, as with all C functions, the individual statements which make up this function are enclosed in braces {}.

One of the ways in which information can be passed to a function is by specifying a list of values, called arguments or parameters, within the brackets which come after the function name. In the example program printf(), which is a general screen printing function provided with all C implementations, has been used like this:

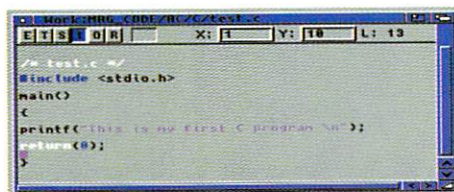
```
printf("This is my first C program\n");
```

which causes the string of characters provided between the double quotes to be displayed. Notice that the above statement ends with a semicolon.

Again this is a general C requirement - all executable statements which appear in the body of any function must have terminal semicolons! The two characters \n also need explaining - they represent a single control

Your chance to get into C coding as **Paul Overaa** brings you the second part of his mini-series

# C-ing is believing



Storm C's multicoloured editor with the example source

character called a 'newline' and, when encountered, signify the end of the current line of printing. Any subsequent text after \n therefore appears at the start of the next screen line.

Whenever you use these types of ready-made functions within a program, the linker will automatically include the appropriate library code. Sometimes in your early coding days you might get error messages during linking and invariably this is due to one of two reasons - either you've told the linker to look in the wrong place (perhaps specified a wrong directory for the library), or you've effectively

asked the linker to find a function which doesn't exist.

Function names are case-sensitive so if, for instance, you wrote Printf instead of printf, the linker would complain that this function couldn't be found.

The last statement used in the example, return(), is used to specify a return value which is produced when the function is used.

This month it's just being used to cause the main() function to return a no error (zero) indicator to the operating system when the program runs. The return statement is, however, an integral part of the more general description of a C function and I'll be dealing with exactly this topic next month! **AC**

## RUNNING THE EXAMPLE

A working Storm C demo was provided on the coverdisk with issue 100 and, if you are using this, running the example code will be easy. Having opened a new project however, you do need to select the 'amiga.lib' library entry in the project window and use the Edit menu's Erase option to remove this entry (this is necessary because the amiga.lib library isn't provided with the demo version of Storm C).

At this point you should open the Storm C editor, type in the program shown in listing one, then save the file using the name test.c (by convention C source files are always given the filename extension '.c', and most compilers expect such an extension to be present).

Having saved the file, pick up the test.c icon that is produced, and drop it into the project window (alternatively you can save typing by drag/dropping the test.c

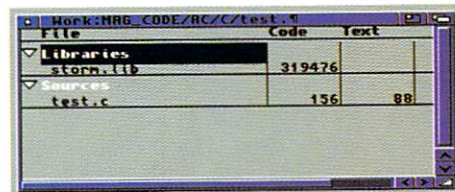
source from the coverdisk into the project window.

Either way Storm C will recognise the source file and add it to the project. To create and run the executable version all you then need to do is select the 'make and run' button which you'll find on the Storm C toolbar (second icon in from the right)!

Dice C demo users get quite a lot of help files provided including a five page ReadMe file. Read it - it explains how to set up the system and also shows you exactly how to compile simple programs (hence we're chosen not to waste space by duplicating those explanations).

If however, anyone does have snags, related to the use of either the Storm C or the Dice C demo, simply drop us a line (or an email) at Amiga Computing and we'll put you on the right track!

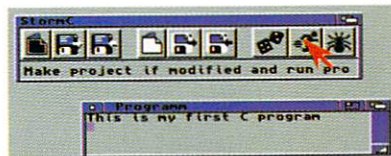
# C Part 2 programming



Once you've added the source to the project your display should look like this

```
/* test.c */
#include
main()
{
    printf("This is my first C program\n");
    return(0);
}
```

Listing 1: Everyone who learns C starts with a program similar to this!



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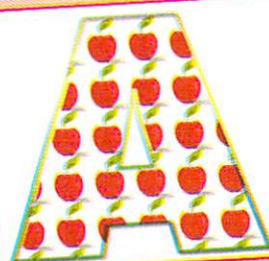
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| Quad Speed CD Rom                      |      |
| for A1500/A2000/                       |      |
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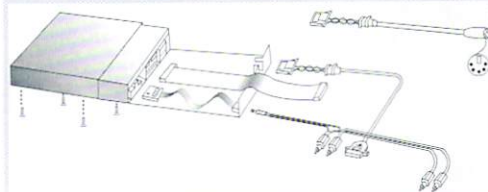


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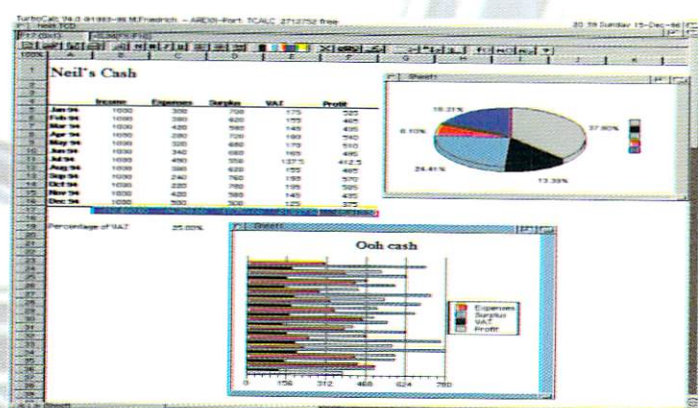
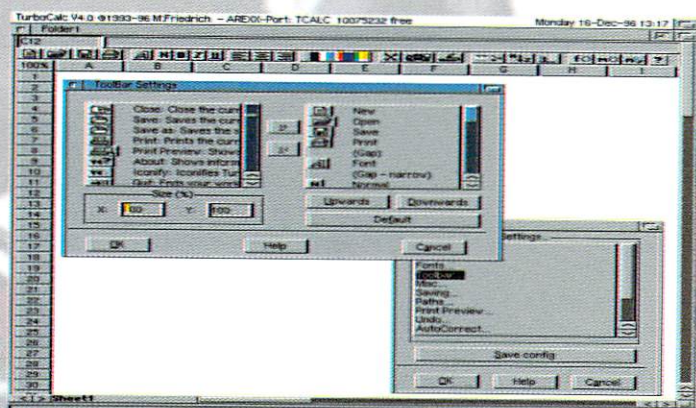
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**I**'m sure all of us can remember, and perhaps some of you out there are going through this, sitting there on hot summer days gazing outside wishing not to have to sit for another minute in a boring maths lesson. To be honest, any mention of maths normally brings to mind the image of a bearded guy, wearing glasses and a psychedelic '70s shirt, explaining part two of advanced trigonometry on an Open University course.

The same goes for spreadsheets, if you were wanting to sell a computer to someone you would not try to impress them with computational speed at which your spreadsheet can sum up last year's tax returns. You would pick something a little more spectacular – well unless you were showing an accountant or something.

Somehow no matter how tedious something is it can manage to be a necessary evil and if there is one thing spreadsheets can do, it's look after numbers. If you want to make sure you stay in the black, a spreadsheet is what you need. That is, unless you are one of the aforementioned school children sitting around in class, in which case you don't even know you're born.

I haven't had much contact with spreadsheets in general and all I can remember from the Amiga ones I have encountered is that they were fairly horrid things to look at – being made for Workbench 1.3, were not very easy to use and were pretty limited. I am glad to say none of this applies to TurboCalc.

From the outset everything ran smoothly with TurboCalc, the good old Amiga installer copied everything across to my ever decreasing-in-size hard drive. Running TurboCalc had it automatically copying the current Workbench screen, so I did not have to even change that.

TurboCalc does not come with a printed manual, something you would normally expect. Instead you get an extremely well organised set of on-line help and tutorial documentation. If you have Workbench 3.0 you will get the very best out of the context sensitive help with all the pop up requesters sporting a help key that will open an AmigaGuide at the correct help page. More generally, help on the menus, functions, macros and settings are always available from a menu along with access to

# Turbo

With Christmas been and gone, **Neil**

**Mohr** needs to straighten out his finances. Maybe TurboCalc will keep his bank manager quiet, for now

the full index or contents.

The only times I really use spreadsheets, apart from way back in my sixth form college days, is when putting together the progress sheet we use here at Amiga Computing. It keeps track of where all the copy is up to and what has left to be written. At the start of the month we allocate

pages for each article and are told how many advertising pages are to be set aside.

Once all the information has been put into the spreadsheet it instantly tells you how many pages it all adds up to. As pages are written these can be marked off and everyone knows where they are up to. Probably not the most conventional use for

## S SPREADSHEETS

If you have never come across a spreadsheet before you won't have a clue what they are all about. A spreadsheet is usually an application that allows numbers and strings to be manipulated in a grid, usually by some mathematical formula.

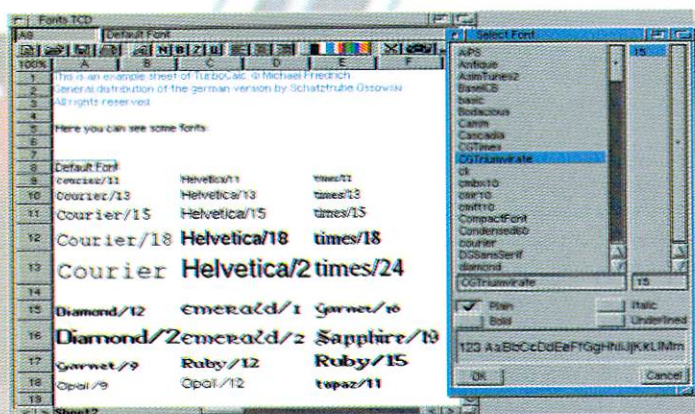
If that has boggled your mind a simple example would be to use a spreadsheet to add up a list of numbers and return the result. If any of the numbers in the list are changed, the total result is automatically updated to the new figure.

When entering formulae into the spreadsheet, you specify the cells in the spreadsheet by entering their x/y co-ordinates which are ordered alphabetically across and numerically down. So to add two numbers

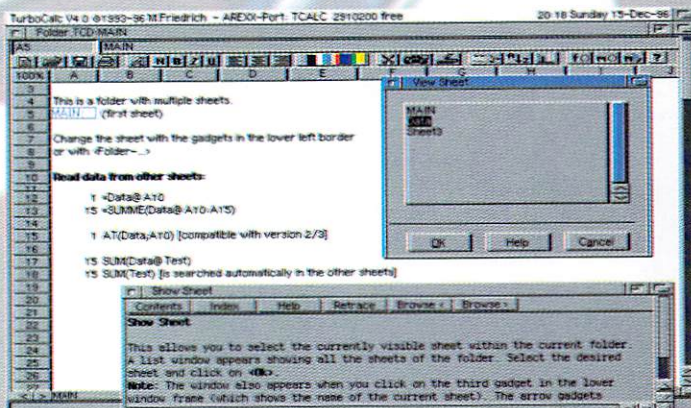
up you would enter in a cell the following:  
=SUM(B1+B2).

This would add up the two numbers in cells B1 and B2, with the result being shown wherever you typed the above. The power of spreadsheets is the ability to copy and paste the formulas used and they retain their relative references. If you had the formula SUM(B4:B8), which sums all the numbers from B4 to B8 and copied it over to the next cell, the formula would be updated to read SUM(C4:C8).

If you are still confused by all this do not be put off – with TurboCalc you get a whole load of example files so you can learn from those, as well as a nicely thought out AmigaGuide based tutorial.



I thought I had managed to find a flaw with TurboCalc's standard fonts requester which is rubbish, but unfortunately there is a use ASL font requester option



Making spreadsheet organisation a much more flexible prospect, separate sheets really do help out

# Power

a spreadsheet but it works as well as anything else, so why not?

As everyone here is on the Mac network we use Excel, Microsoft's big old spreadsheet, to maintain the progress sheet, and I'm glad to say TurboCalc is every bit of a match for it, while being a sixth of the size.

It has a huge number of functions for use with the spreadsheet calculations approaching 200 or so. It covers everything from basic arithmetic functions, such as add and subtract, to complex trigonometric functions. It also has Boolean operators, string and date commands and functions to help

automate spreadsheet functions in TurboCalc macros.

Using TurboCalc does not mean a boring life of plain spreadsheets. If you want to add a bit of colour, choose one of the many types of charts it has to offer. On the whole they are very easy to set up, just tell it where the figures you want plotting are. You can then produce a bar, line, point, area, step and pie chart. All these offer 3-D versions and can have colour and patterns applied to each section. The pie chart is particularly nice as it lets you pull out segments if you need to highlight a



## NEW CLEAN SHEETS

One of the new additions to version four of TurboCalc is sheets. Instead of each separate spreadsheet being thought of as a single entity it is now only a single sheet out of as many as you want. Each spreadsheet project is called a folder, which of course can hold as many spread sheets as you like.

This makes organising large spread sheets far easier. Previously, if you wanted to keep tables of information separate you would have had to spread the tables all over the single sheet – which meant a lot of scrolling around your documents if you wanted to change figures in another table. There is also the possibility you could run out of room on a single spreadsheet.

By adding extra sheets you can really simplify this job and make your spreadsheets much easier to access. Say you want to work out your monthly outgoings such as food, rent and petrol but also wanted a separate overall breakdown. You could create separate sheets to hold the individual entries and another to hold the totals.

For each sheet you create you can either flip through each one using the arrow buttons on the bottom left of the window or use the pop up requester to select a sheet. I found TurboCalc also lets you have a separate window open for each sheet using the open new view option and of course, as soon as you alter a value on one sheet all the sheets are updated.

specific part of the pie.

Further fancy additions can be made to your spreadsheet through TurboCalc objects. These drop scaleable bounding boxes onto your spreadsheet and can be moved to any position or size you like. Most simply this allows you to splash IFF graphics onto your spreadsheets to make them a little more interesting, or have a freely positionable text box.

A chart can also be made an object and you can have a chart, of what ever sort you wanted, laid onto the spreadsheet. As your spreadsheet is updated, the chart is dynamically updated as well – an excellent feature.

TurboCalc is an exemplary Amiga program – easy to learn, quick to use and yet has the power for even the most demanding user. The only criticism I could level at it is I wish the gadgets had thin sides so they look correct on 1x1 ratio screens, but that is hardly going to put you off! **AC**

## Bottom line

### REQUIREMENTS

RED essential BLACK recommended



Workbench



Workbench 3Mb Hard drive

### PRODUCT DETAILS

|          |  |
|----------|--|
| Product  | TurboCalc v4   |
| Supplier | Digitia International                                    |
| Price    | £39.99 Upgrade £29.99                                    |
| Tel      | +44 (0)1395 270 273                                      |
| Email    | support@digita.demon.co.uk<br>WWW:http://www.digita.com/ |

### SCORES

|                 |     |
|-----------------|-----|
| Ease of use     | 95% |
| Implementation  | 90% |
| Value For Money | 95% |
| Overall         | 93% |

**T**he Hewlett Packard 5L laserjet is a quality printer that bridges the performance and price gap between professional business machines and those for home use. As such, it is designed for the home or small workgroups. Because of this, it is the least expensive (almost by a third) of the H-P 5 range.

As a result it has more limitations than its more expensive brethren. These might matter for business users but for the home user or small work groups they won't pose a problem. Despite costing £499, the 5L is one of the best value modern quality printers available.

The output quality sounds impressive. Its 600 x 600 dots per inch ensures it can hold its own against other, more expensive competitors. The quality promises to be flawless; its text is crisp and well defined and greyscale imaging is impressive.

Aesthetically the 5L's design is a little unusual with its curved base and raked paper bins. It might not be to everybody's taste but it is certainly distinctive. If your study is a clutter, this printer is probably a little bulky and certainly isn't as space efficient as one of the tower designs such as the Panasonic KX P6100.

The paper handling should beat most other equivalent printers. It incorporates two paper bins, one of which holds 100 sheets while the other is a single sheet 'priority input slot'. It won't restrict what quality and weight of paper has to be used - a straight through path allows you to print on paper upto 43lb bond weight.

The 5L has a cunningly adaptable paper handling facilities to cope with not just A4 but also envelopes and other odd shape stock. Both bins have sliding guides which

can be pushed inwards to keep the sides of the paper properly aligned.

The technical specifications are impressive. The 5L is managed by a 24MHz Motorola 68030 processor and because it incorporates Memory Enhancement Technology, it allows output of 600dpi on only 1Mb of memory.

This can be upgraded to 9Mb via an empty memory slot which would enable the printer to accomplish even the biggest, trickiest job you could imagine and also enable you to download fonts and the like. As well as this, the Hewlett Packard 5L incorporates a number of useful features such as the HP Printer Pal which allows you to receive faxes on plain paper.

The printer should be efficient and easy to use with a very good driver and onscreen help. Rather than looking like the bridge of the starship Enterprise, it is uncluttered with buttons and LEDs - in fact there is only one button - for on/off - the rest is automated and operated from the computer.

The machine has a couple of possible

drawbacks but these stem from the fact that it is an inexpensive version of a pricier business machine.

First of all, it might not be especially fast although it should manage a fairly reasonable four pages per minute. Also the foldout paper guides aren't especially sturdy, and depending on the number of toddlers, cats and dogs running about your house, there is a chance that a collision could result in a breakage. Having said that, equivalent models of the same price probably wouldn't be any better equipped.

In the quality personal laser printer market, the Hewlett Packard 5L is one of the best in terms of output quality, ease of use and value for money. Although slow compared to a business machine, the output rate of four pages per minute should be sufficient for home use and the 600dpi output quality puts many of the competition to shame.

In short, although maybe a little more pricey than other printers, the Hewlett Packard 5L is everything you would want from a modern laser.

AC

# Premier Packard

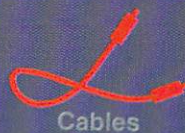
**Hugh Poynton** takes a look at  
H-P's quality home printer



## Bottom line

### REQUIREMENTS

**RED essential** **BLACK recommended**



Cables



Turboprint/  
Studio2

### PRODUCT DETAILS

|                 |                     |
|-----------------|---------------------|
| <b>Product</b>  | 5L Laserjet Printer |
| <b>Supplier</b> | Hewlett Packard     |
| <b>Price</b>    | TBA                 |
| <b>Tel</b>      | 01344 360000        |

**Paxtron is North America's largest wholesale supplier of Amiga replacement and upgrade chips**

## REPLACEMENT & UPGRADE CHIPS

| (Factory New)  | PRICE             |
|--|-------------------|
| 1.3 ROM O/S  | \$12.50           |
| 2.04 ROM O/S   | \$19.95           |
| 2.05 ROM (V37.350) (A500 & A2000)                                  | \$19.95           |
| 2.04 ROM A3000 (Set of 2 ROM 0/1)                                  | \$34.50           |
| 2.1 Workbench for floppy users (complete O/S without support file) | \$7.95            |
| 3.1 ROM (A500/A2000)   | \$49.95           |
| 3.1 ROM (A3000/A4000)  | \$62.50           |
| 3.1 ROM (A1200)  | \$62.50           |
| 3.1 ROM(s) Software/Manual   | \$124.00/\$137.50 |
| ROM Switch/Switch-It with speaker                                  | \$17.50           |
| 3.1 manual only  | \$69.95           |
| 3.1 Software   | \$10.00           |
| 3.1 Workbench for floppy users (complete O/S without support file) | \$7.95            |
| A2091 7.0 ROM Upgrade  | \$19.95           |
| A2620/30 7.0 ROM Upgrade   | \$19.95           |
| 8520 CIA   | \$11.95           |
| 8372A/8375 Agnus with diagnostic disk/guide                        | \$22.50           |
| 8375-B (2MB) (A3000) 318069-03                                     | \$25.50           |
| 8375-10 Agnus (318069-10) PAL                                      | \$17.95           |
| 8375-18 Agnus (318069-18) 2 meg PAL                                | \$15.95           |
| Agnus PLLC chip puller   | \$10.50           |
| Paula (8364) A500/A2000  | \$10.95           |
| Denise (8364) A500/A2000   | \$10.95           |
| Super Denise 8373 w/diagnostic disk                                | \$19.95           |
| Gary 5719 A500/A2000   | \$10.95           |
| Buster 5721 (A2000)  | \$16.95           |
| 68000-8MHz CPU (DIP)   | \$11.50           |
| 68000-16MHz CPU (DIP)  | \$22.50           |
| 68030-RC50 PGA   | \$84.50           |
| 68882-25 PGA   | \$24.95           |
| Western Digital SCSI chip 8A                                       | \$27.50           |
| Video Hybrid - (A500 390229-03)                                    | \$9.95            |
| GVP Upgrade Chip Series II   | \$29.95           |
| 6570-01 (71) (315107-01) Keyboard, IC                              | \$14.95           |

## SURFACE MOUNTED DEVICES

| (For A1200, A3000, A4000, CD32) | PRICE   |
|---------------------------------|---------|
| 8520 PLLC (391078-02)           | \$19.50 |
| Amber (390538-03)               | \$24.50 |
| DMAC 4 (390537-04)              | \$34.50 |
| Lisa (391227-01)                | \$24.50 |
| Ramsey (rev.4) 390544-04        | \$19.95 |
| Ramsey (rev.7) 390541-07        | \$36.50 |
| Alice 8374 (391010-01)          | \$25.50 |
| Gal (XU9) (390123-01)           | \$21.95 |
| Gayle (315107-02)               | \$19.95 |

|                                    |         |
|------------------------------------|---------|
| Budgie (391425-01)                 | \$33.95 |
| Super Denise (391554-01)           | \$29.95 |
| 6571 Keyboard Chip (391079-01)     | \$14.95 |
| 6570-036 Keyboard Chip (328191-02) | \$14.95 |
| Paula 8364 (391077-01)             | \$27.95 |
| Gary (390540-02)                   | \$32.95 |
| Super Buster Rev. 11 (390539-11)   | \$34.50 |
| Brigitte (391380-01)               | \$29.50 |
| Video DAC (391422-01)              | \$19.95 |
| 68000CPU (390084-07)               | \$13.95 |
| 68020-16 (391506-01)               | \$18.95 |
| MC 68882RC25A PGA New (390434-01)  | \$19.95 |
| MC 68882RC22A PGA                  | \$30.00 |
| MC 68882RC33A PGA                  | \$37.50 |
| XC 68882RC40A PGA                  | \$69.95 |
| MC 68030FE25B QFP (390399-05)      | \$19.95 |
| MC 68030RC50 PGA                   | \$79.95 |

## MOTHERBOARDS (Factory New)

|  |           |
|--|-----------|
| CD32 (no RAM memory) NTSC                            | \$89.95   |
| CD32 complete with RAM/tested NTSC                   | \$109.95  |
| CD32 complete with RAM/tested PAL                    | \$89.95   |
| CD32 replacement CD mechanism                        | \$39.95   |
| A500 (rev. 3) inc all chips (see below)              | \$49.50   |
| A500 (Rev. 5/6)                                      | \$89.50   |
| A600   | \$134.00  |
| A1200 (NTSC) Limited quantity 3.0 O/S all memory New | \$289.95  |
| A1200 (PAL) Limited quantity 3.0 O/S all memory New  | \$279.95  |
| A2000 LATE Rev. 8372/2.05                            | \$399.95  |
| A3000 (16MHz)  | \$299.95  |
| A3000 (25MHz)  | \$359.95  |
| A3000T (Tower) 25MHz                                 | \$389.95  |
| A4000 (limited quantity)                             | CALL      |
| C64 (refurbished, tested all chips)                  | \$29.95   |
| C64 untested, all chips clearance                    | 2/\$25.00 |
| C128   | \$49.95   |
| C128D  | \$69.95   |
| 1541 II  | \$17.95   |
| 1541 Alps (15000401)                                 | \$17.95   |
| 1571 Newtronics (310420-01)                          | \$17.95   |

## AMIGA FLOPPY DRIVES (Factory New)

|  |          |
|--|----------|
| High Dens. External floppy for all Amigas        | \$114.95 |
| High Density Internal Floppy Drive:              |          |
| A3000/A4000 (specify)                            | \$104.95 |
| A2000  | \$109.50 |
| A500 Internal 880k                               | \$38.95  |
| A600/1200 Internal                               | \$47.50  |
| A600/1200 new Amiga Tech. special release button | \$1.95   |
| A2000 Internal 880k                              | \$39.95  |

|                               |         |
|-------------------------------|---------|
| A3000 Internal 880k           | \$49.95 |
| A4000 Internal 880k           | \$49.95 |
| CD32 Replacement CD mechanism | \$39.95 |
| 1541 (refurbished)            | \$39.95 |
| 1571 (limited quantity)       | \$49.95 |

## POWER SUPPLIES (Factory New)

|  |           |
|--|-----------|
| A500   | \$38.95   |
| A500/A600/A1200 Big Ft. (200 Watt) Micro R/D | \$79.95   |
| A500 power supply (used) 220 volts Europe    | \$19.95   |
| A590   | \$19.95   |
| A1200 110 volts original factory             | \$38.95   |
| CD32 Original / Factory (110 volts)          | \$21.95   |
| CD32 Original / Factory (220 volts)          | \$14.95   |
| CD32 Big Foot (200 Watt) Micro R/D           | \$74.50   |
| A2000 110/220V. internal original            | \$89.95   |
| A2000 Big Foot (300 Watt) Micro R/D          | \$144.50  |
| A3000 internal (110/220 volts)               | \$110.00  |
| A3000 Big Foot (250 watts) Micro R/D         | \$144.50  |
| A3000 Tower                                  | \$124.00  |
| A4000 internal (110 volts)                   | \$119.00  |
| A4000 int. 300 Watt Big Foot (exchange)      | \$169.95  |
| 1084S Phillips Flyback Transformer only      | \$38.95   |
| 1084-D1 Phillips/Daewoo Flyback only         | \$38.50   |
| 1084-D2 Daewoo Flyback Transformer only      | \$38.50   |
| 1084S new Motherboard/Flyback                | see below |
| 1084S power supply board (refurbished)       | \$29.95   |
| C64 nonrepairable                            | \$14.95   |
| C64 repairable                               | \$19.95   |
| C64 5.2 amp Heavy Duty (also 1750 REU)       | \$39.95   |
| C65 220 Volts                                | \$12.50   |
| C65 110 Volt                                 | \$21.95   |
| C128D internal                               | \$24.95   |
| C128 external 5.2 amps                       | \$39.95   |
| 1541 II/1581                                 | \$7.50    |

## KEYBOARDS (Factory New)

|                                       |           |
|---------------------------------------|-----------|
| C64                                   | \$17.95   |
| C65 (Special Keyboard)                | \$19.95   |
| A500 (limited quantity)               | \$39.95   |
| A600                                  | \$26.50   |
| C128D (limited quantity)              | \$24.95   |
| A1200                                 | \$34.95   |
| A2000 US version (Amiga Technologies) | \$74.50   |
| A3000 US version (Amiga Technologies) | \$74.50   |
| A4000 US version (Amiga Technologies) | \$74.50   |
| Amiga compatible IBM keyboards        | see below |
| A2000 keyboard adapter to A4000       | \$8.95    |
| A4000 keyboard adapter to A2000       | \$8.95    |
| 6570-01 (71) (315107-01) Keyboard, IC | \$14.95   |

## ADD ON BOARDS (Factory New)

|   |          |
|---|----------|
| 68020-030 (A4000)                                 | \$67.95  |
| A386 (20MHz) Bridgeboard /SW /Instr.              | \$259.95 |
| A2088XT/AT Bridgeboard Kit/drive, manuals (A2000) | \$29.50  |
| A2058 (0K) (A2000) Expansion board 8K             | \$69.95  |
| A501 original Ram Exp. - 512K (A500)              | \$17.95  |
| Microway Flickerfixer                             | \$224.00 |
| Slingshot Pro/pass thru (Micro R/D)               | \$37.50  |
| A1050 RAM Expander (A1000) 256K                   | \$10.95  |

## ACCELERATORS

|         |      |
|---------|------|
| Apollo  | CALL |
| Phase 5 | CALL |

## MOUSE CONTROLLERS (Factory New)

|  |         |
|--|---------|
| Amiga 1352                             | \$22.50 |
| Wizard 3-button (for all Amigas)       | \$22.95 |
| A4000                                  | \$26.85 |
| Amiga CDTV                             | \$15.95 |
| Amiga A1200 mouse port replacement kit | \$7.95  |
| CD32 controller                        | \$11.75 |

## DIAGNOSTICS

|                                     |           |
|-------------------------------------|-----------|
| Advanced Amiga Analyzer (see below) | \$59.95   |
| Final Test diagnostic disk by Amiga | \$7.95    |
| Amiga Troubleshooting Guide         | \$7.95    |
| Commodore Diagnostician II          | \$6.95    |
| C64/128 Dead Test cartridge/manual  | \$19.95   |
| Service Manuals                     | SEE BELOW |

## CLEARANCE SALE

|  |               |
|--|---------------|
| ICD Ad RAM 2080                                | \$49.95       |
| ICD Ad SCSI 2000                               | \$49.95       |
| ICD AdSCSI 2080                                | \$59.95       |
| A520 (New) Video Modulator                     |               |
| Adapter kit/cables/instructions                | \$12.50       |
| 2.04/3.1 ROM Switch - (Switch It) with speaker | \$17.50       |
| 256K4 RAM for A2058 expander, etc.             | \$4.50        |
| 15-23 pin adapter cable                        | \$19.95       |
| Monitor Cables - 30 Different types            | CALL          |
| C64 untested motherboard/all chips             | 2 for \$25.00 |
| C128 untested motherboard/all chips            | \$19.95       |
| Monitors: 1084S, 1950, 1802, etc.              | SEE BELOW     |
| CDTV modulator                                 | \$2.95        |
| CDTV unit (No Cabinet)                         | \$89.00       |
| Laser printer memory board 0K (All HP units)   | \$24.95       |
| Sony QD6150 data cartridge                     | \$7.50        |
| A1200 top/bottom case                          | \$19.50       |
| Joystick - Captain Grant (for all Amigas)      | \$22.99       |

★ **ONLY AT PAXTRON** ★

- **A500 COMPUTER** with power supply and latest chips (eg. 8372 Agnus, 2.04 O/S). Includes your choice of the following software/books: Starter Kit, Discover Kit (inc. Kind Words, Deluxe Paint II) or Deluxe Kit. Also includes free Amiga Troubleshooting Guide (\$7.95 value), 90 day warranty, tested & ready to go. Fantastic price .....**\$119.95**
- Options: A501 1/2 meg expansion memory board installed add \$10.00. ● With 3.1 O/S ROM add \$48.50. ● PAL unit with 220V power supply add \$29.00 ●
- **A501 original CBM 512KB Memory Expansion Card** with clock, calendar/battery for A500. In original box instructions and warranty. ....**\$17.50**
- **A520 Video Modulator Adapter Kit** with cables and instructions (NTSC). Run any Amiga on your television.....**\$10.50**
- **AMIGA COMPATIBLE KEYBOARDS** - (Just released from Germany.) KB100 is a sophisticated in-line adapter box for use with IBM keyboards. Use the KB100 on your A500/A2000/A3000/ A4000. (A600/A1200 require soldering.).....**\$49.95**
- **Complete service manuals.** Some manuals may be photocopied. 5 day delivery on some manuals. A500, A500+, 590, A1000, 1230 printer, 1802, 1902, 1902A, 1934, 2002, 2091, 2300, 2630, CDTV, 1581, C65 .....**\$19.95**  
A500 schematics, A600, 1084S, 1084S-D1, 1084ST, 1936A, 1960, A2000 .....**\$24.00**  
A1200, A3000, A3000T, A4000, CD32.....**\$39.95**
- **1084S MONITOR MOTHERBOARD WITH BUILT IN FLYBACK TRANSFORMER** - This new board will cure 90 percent of 1084S monitor problems. Simply switch the motherboard and your monitor problems are solved! This motherboard with the flyback factory mounted is the exact replacement and works with 1084S models only. It's easy to install .....**\$69.95**
- **AMIGA MONITORS** - We have a large supply of refurbished 1084(S), 1902, 1930, 1802, 1702 monitors, etc. For example, the 1084(S) is **\$169.95** with cable. 90 day warranty. **CALL**
- **A1200 MOTHERBOARD** - Paxtron has purchased a limited supply of new A1200 motherboards, both NTSC and PAL. They come with 3.0 O/S, all chips, 30 day warranty. Specify NTSC or PAL .....**\$289.95**  
(Optional - 3.1 O/S and diskettes, installed add \$56.95.)
- **SUPERGEN (Internal Genlock)** for A2000 - By Progressive Image Tech/Digital Creations. Most flexible Genlock and video overlay device for all Amigas. Supergen provides a flexible broadcast quality Genlock at a very, very affordable price. Comes with external control box and cable. Includes a 90 day warranty instruction book. This is a factory refurb unit selling for a fantastic low price of.....**\$179.95**  
(Internal Supergen sold initially for \$650.)

## ADVANCED AMIGA ANALYZER 2.0™

**AN INEXPENSIVE DIAGNOSTIC ANALYZER THAT WORKS ON ALL AMIGAS**

A complete diagnostic hardware and software analyzer (uses point and click software interface.) The analyzer cable plugs into all Amiga ports simultaneously and through sophisticated software, displays 8 screens to work from. Shows status of data ports, memory (buffer) checker, system configuration and auto test. Reads diagnostic status of any read/write errors from track 0 to track 79. Software automatically tells what errors are found and the chips/components responsible. 85 to 90% of the problems presented to service centers are found with this analyzer. Saves you lots of money on repairs and no end user or repair shop can afford to be without one. Don't be fooled by its low cost. Simply plug in cables from the analyzer box. This diagnostic tool is used by end users and Amiga repair centers worldwide and is the only one of its kind. Over 15,000 sold.

New low price

**\$59<sup>95</sup>**

•• New 2.0 Version ••

## Amiga "Q-Drive" 1241 CD ROM Drive for the A1200

The Amiga Technologies "Q-Drive" 1241 is a PCMCIA interface for the Amiga 1200 (CD32 emulator). It is a super fast CD-ROM drive equipped with a PCMCIA connector.

**Price: \$179.95** (Quantity pricing available)

★★★ **WANTED** ★★★

Get Cash for your A2000 computers.  
New or Used (NTSC or PAL).

We pay top dollar. We also pay UPS shipping charges.

## ATTENTION DEALERS

Paxtron has been appointed as a North American distributor for ACT Apollo and Phase 5 accelerators. Give us a chance to quote you our best prices.

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**ATTENTION DEALERS:** If you would like to receive our dealer catalog fax us your letterhead.



s you've probably noticed, there are now a multitude of Internet

Service Providers all clamouring for the business of connecting Joe Public to the World Wide Web. But as Amiga owners know only too well, many are all geared up for the average PC owner and not those with Amigas. Fortunately, many are now realising that there is a huge untapped market out there of Amiga users who want to get connected.

We thought we'd find out how they fair when it comes to those who want to get connected with their Amiga. What do they know, how much does it cost and why should you choose them? We took a selection of some of the most popular and some of the smaller outfits to see who is the best when it comes to the Amiga surfer.

## ZETNET

Ken at Zetnet said:

### What can you offer the Amiga owner?

We provide our Amiga users with necessary software for gaining access to the web (scripts, etc.) as well Internet Client software. Amiga Technical support is also available.

### When is technical help available?

Technical support is available from 9 AM to 8 PM, Monday to Friday and 9AM-5PM on Saturday.

### What extra's do you offer eg. free web space?

Each account comes with 5Mb of free web space.

0345 local call number from anywhere in the UK. If you recommend two friends to Zetnet services in one calendar month, then you get 1 months free subscription

### How much do you charge?

Setup fee of 20 ukp (waived if transferring from another ISP)

Thereafter 7.50ukp per month or 80 ukp for the whole year. (Prices are inclusive of VAT) No online charges/hidden charges, etc.

### What is your user-to-modem ratio?

12:1

### Do you have Points Of Presence all over the UK?

We operate an 0345 local call service from all over the UK

### What mail protocol do you have - SMTP or POP?

POP3 mail protocol

### Demon sales told us: What can you offer the Amiga owner?

We have Amiga software available on our ftp site, but unfortunately we do not support it. It is also available on floppy for a media/copying fee of UKP7.50 + VAT

### When is technical help available?

24hrs a day, but again our Amiga software is only supported on a "best effort" basis.

### What extras do you offer?

5Mb Free Web Space.

### How much do you charge?

Connection : UKP12.50 + VAT

Monthly : UKP10.00 + VAT Payable by Credit Card or Direct Debit

### What is your modem-to-user ratio?

No figure published.

### Do you have Points Of Presence all over the UK?



**Demon  
Internet**

Local rate numbers:  
COLT ROMP

The COLT ROMP offers potentially increased access speeds, more

lines and currently has a lower usage rate than the Energis ROMP.

Standard Dial-Up 0845 353 5666 (33.6 Kb/s)  
ISDN Access 0845 353 5667

Energis ROMP

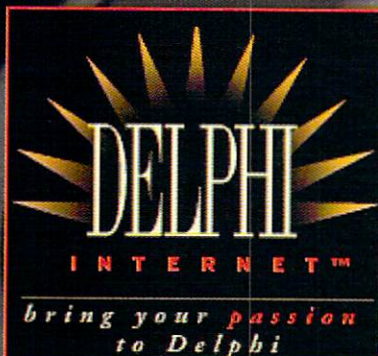
Standard Dial-Up 0845 079 8666 (28.8 Kb/s)  
ISDN Access

Calls to the COLT and Energis ROMPs are charged by BT at local rate; customers of other telephone companies should check with their provider.

### What mail protocol do you have? SMTP

### Why choose them?

"Demon Internet is the UK's largest, most experienced provider of fast, dial-up access to the Internet."



Jon Maguire told us:

### What can you offer the Amiga owner?

As our service is firstly a text-based service the initial connection can be made very simply using any terminal program set to 8-N-1. Through it, it is possible to access a wide range of Internet services including Telnet, FTP, VT100 web browsers.

However if the user would like, it is possible to create a SLIP connection, using the appropriate software on ANY platform. The only software we supply ourselves is an outdated interface for our text-based service, for the PC platform only. Users of Win31 use Trumpet Winsock and Win95 users use the inbuilt Dialup Networking facility.

### How much do you charge?

We offer two dial-up access plans, the 10/4 plan (£10 per month, 4 hours free a month), and the 20/20 plan (£20 per month, 20 hours free a month)

### What extras do you offer?

In addition each account can have up to 10 sub accounts, and we provide a fixed amount of web/file space (10Mb).

### When is technical help available?

Our help desk is open Mon-Fri 9am-8pm. And our experienced, and helpful staff will be glad to help users on any platform.

### What mail protocol do you have?

POP3 and SMTP mail protocol and access to newsgroups through our news server, with the ability for Telnet access to users from anywhere on the planet.

### Why choose them?

All in all Delphi offers a good package for Amiga owners because we can allow access through a wide range of channels and the ability to access the Internet directly with a VT100 terminal.

**Tina Hackett** takes a look at Internet Service Providers for Amiga users

# At Your

Clive at ProWeb told us:  
**What can you offer the Amiga owner?**

We offer local dial-in access (Diamond Cable - Free calls 6pm-8am Mon-Fri and all weekend!).

We provide start-up software on five 3.5" disks and a range of other software on our ftp site.

**When is technical help available?**

Telephone support is NOT available for Amiga users as we are not "Amiga aware" :( but we HAVE a contracted an Amiga support chap, who provides Email support AND answers questions in our [proweb.amiga](mailto:proweb.amiga@news.grouper.com) newsgroup. He is the chap who put together the setup software, and he will also provide telephone help to any user in extreme difficulty, (but not toooften, as he's a professor in Ireland!)

**What extra's do you offer?**

1Mb of free disk space, a pop3 e-mail address with up to five aliases (routed to your pop3

**ProWeb**

mail account) and a free starter home page.

**How much do you**

**charge?**

Once only start-up fee: £15.00 inc. VAT

Monthly fee: £12.50 inc. VAT (0845 Local-Call £15.00 inc. VAT)

**What is your user-to-modem ratio?**

7-1 at the moment (we are quite young!) and we will keep it below 15-1

**Do you have Points Of Presence all over the UK?**

No.. only 0845 local call access.

**What mail protocol do you have - SMTP or POP?**

POP3 & UUCP.

**Why choose them?**

As you can see, we are not Amiga specialists, but we do have 10 Amiga users currently subscribing to our service who seem more than happy.

**What can you offer the Amiga owner?**

We will be offering our Amiga customers a comprehensive software package with all the tools they need to get up and running on the Internet.

**When is technical help available?**

NETCOM offers 24 hour, 7 days a week technical and customer support for all its customers.



**What extras do you offer?**

All NETCOM customers receive 1Mb of free web space with their account.

**How much do you charge?**

We have no connection fee, and our monthly charge is £14.95 inc VAT for unlimited use.

We offer a special introductory rate of £5.95 inc VAT for the first month.

**What is your user-to-modem ratio? 17:1**

**Do you have Points Of Presence all over the UK?**

Yes. We provide 100% local call rate access through-out the UK through a single number dial-up.

**What mail protocol do you have - SMTP or POP?**

We use POP for mail delivery, and SMTP for sending from the client.

**Is this service for the Amiga owner available worldwide or just in the UK?**

All NETCOM customers can access our service at local call rates from the UK, US and Canada. They can also access our service outside these areas, but international call rates will apply.

**Why choose them?**

NETCOM's Amiga customer will receive the same high level of service and network reliability available to all our customers. Our industry leading service recently led to our being awarded Provider of the Year by *Internet* magazine and Best Internet Provider by *PC Advisor* magazine.

## CONFUSED?

If you did not see our guide to getting online last month, you may want to know some basics:

**User-to-modem ratio**

The less users to a modem the better

**Point Of Presence**

If they have one local to you it saves money on long distance phone bills

**Free Web Space**

Gives you space on the World Wide Web to display your very own home page

**Mail Protocol**

The way the ISP will send and receive your Email. Consider this when you choose your Email package



**What can you offer the Amiga owner?**

We can offer dial up accounts for Amiga users, but they will have to supply their own software and find their own technical support as we do not support Amiga users.

**When is technical help available?**

The technical support line is open at the following times:

Monday - Friday  
09.00hrs - 21.00hrs  
Saturday -  
Sunday 10.00hrs - 16.00hrs

**What extras do you offer - any free web space?**

We do not currently offer free webspace with

our dial up accounts

**How much do you charge?**

Charges are as follows:

Annual Account £89.99 + vat

Quarterly Account £29.99 + vat

Monthly Account £9.99 + vat, plus a setup fee of £10.00 + vat.

**What is your user-to-modem ratio?**

25:1.

**Do you have Points Of Presence all over the UK?**

We cover the entire UK with local call access and have POPs throughout.

**What mail protocol do you have - SMTP or POP?**

POP3 mail.

## US FEEDBACK

Unfortunately, although we contacted some larger American ISP's they did not respond in time to our questionnaire. So this is where our US readers come in - if you know of any good American ISP's that are kind to Amiga owners let us know. We will publish the results in a later issue.



# Service

**O**ver the years the Amiga has had more than its fair share of programming languages. One of the first was the fairly abysmal Amiga Basic, written by some company called Microsoft. HiSoft has also had a go with its long running and very competent HiSoft Basic.

What really got the ball rolling was AMOS, based on STOS the original Atari ST version, it brought us a powerful and highly flexible programming language that was also simple to learn. This was soon followed by AMOS Pro for people who wanted even more out of AMOS and included a compiler to allow standalone programs and after that, EasyAMOS to simplify programming even more.

Later, a rival to AMOS appeared in the form of Blitz Basic and was used to write the highly addictive Skid Marks. Being the more recent program Blitz managed to attract a good number of AMOS and new programmers, due to the better Intuition based editor and debugger, along with the fact you could, from the start, produce proper multitasking programs as well as hardware bashing games. Blitz however never seemed to get the mammoth following that AMOS managed to gain.

The aim of both Blitz and AMOS was to give the user a programming language that was simple to learn and use, but gave the most modest of programmers access to powerful graphical effects even on relatively slow machines such as the A500. This is made possible by the languages doing two things: Firstly by disabling the operating system, every CPU cycle can be utilised by your program and your program alone. Secondly, by giving the programmer specific commands for manipulating graphics and sound, these can be optimised to make sure they run as fast as possible.

Even though a good deal of speed can be gained with specialisation of commands, you will never be able to get the absolute speed of commands written in pure assembler. Even the best compiler will not be able to produce code as fast as hand written assembler – a human can make more advanced optimisations and take better advantage of the processor.

# Power to the Programmer

With the power of assembler and the ease of a high level language, is Secal the answer to your programming prayers?

The problem is that assembler is nowhere near the easiest language to program in. With odd command names, bizarre types of addressing, the fact you have addressing and that you end up with very hard to follow code, all adds up to making assembler a hard language to learn. When coding with this you really do have to think the way the computer processor works, as you are coding on the single instruction level.

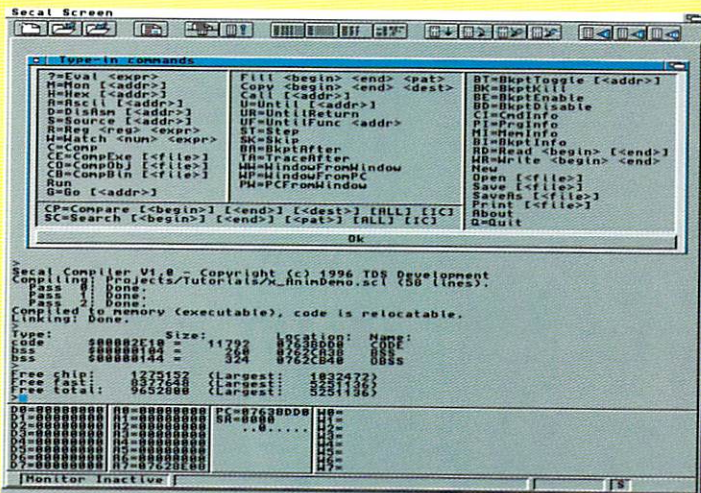
The point of Basic and high level languages such as Cobol, Pascal and C is to make coding more like writing a description of what you want the program to do. Allowing you to think more in terms of the problem you want solving, rather than how you can get the computer to solve the problem you have. All this extra ease of programming is at the expense of execution speed.

## SECAL

Secal is an all new programming language and, unlike Blitz and AMOS, it is not exactly designed as a straight forward Basic, even though there are certain points that may make you think it is.

It describes itself as a language that integrates the elements of both low and high languages into one environment. Essentially Secal gives you an assembler compiler that allows you to use Basic style commands intermixed with the assembler code and the processor's data and address register names. The idea being that this makes for more readable code, far easier to maintain and update and yet keeps all the execution speed of a pure assembler version of the same code.

Secal makes this possible by limiting the



The main monitor screen has all the debugging tools you would expect



A full space invaders game with sounds and parallax scrolling is possible in a few hundred lines of Secal code

# to the

# mer

number of high level commands you have available. Along with standard mathematical operations, the only other real high level instructions are conditional commands – IF THEN, REPEAT UNTIL, WHILE DO and FOR DO. You may think this would not make a massive difference to a program, but studies have shown on average, almost 50% of program code is taken up with jumps and conditional commands.

This combination of assembler and high level commands allows you to have statements like this:

```
For d2:=d3+10 downto 0 do X:=X+d2;;
```

Where you are able to specify both processor data registers and Secal variables all in the same line. This allows you to take advantage of having regularly used variables stored in registers, while also having the convenience of being able to use normal variable names for less important values.

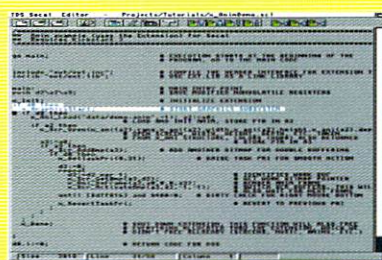
## INTEGRATED SOCIETY

It had to happen, there are only a finite number of three letter acronyms in the world and at some point they had to run out. Secal sports what is known as an IDE, nothing to do with the type of hard drive, but an Integrated Development Environment. This fascinating thing just refers to a combined editor, compiler and debugger. From one tool you can write compile and track down bugs. If anything this gives you a better environment for writing programs as you are not forever switching between a separate editor, shell compiler and separate debugger.

To help you along even more, a tool bar runs along the top of the screen. Though this cannot be changed by the user all of the most commonly used commands are here

for you, and any that are not more than likely have a keyboard shortcut.

Both the debugger/monitor and program editor are accessed through the same screen with you switching between the two using a button on the tool bar.



The main editor is straight forward to use and acts like any normal Amiga text editor



## JARGON BOX

**BASIC** – Beginners All purpose Symbolic Instruction Code, originally referred to a simple language designed by John G. Kemeny and Thomas E. Kurtz at Dartmouth College in 1963. To allow students to quickly pick up and learn basic programming skills. More generally refers to any language suitable for beginners, even though many recent Amiga languages called Basics go far beyond this

**CPU cycle** – Refers to the time it takes the CPU to process one instruction

**Optimisation** – The processes of re-writing program code, so the same job is done but in less time

Secal.lib has your normal string manipulation functions, but the real interesting stuff can be found in Ext.lib. The functions in the library provide a simple way for you to handle Amiga screens and sprites, play music, sounds and animation – all within the Amiga's operating system.

The functions provided are quite flexible – the music ones allow protracker modules to be loaded into memory off a disk and played when you like, along with samples that are already in memory.

On the graphic side of things, Secal gives you all the functions you need to create Amiga screens either single or double buffered and then to place sprites and sprite groups onto the screen. Functions are there to add masks to the sprites so you can move them over backgrounds. There is even a chunky to planar conversion routine.

Further functions give you file access with all memory allocation and de-allocation being automatically handled, control over the blitter and task priorities are also in there.

Secal is an interesting language, the ability to use both high level commands and assembler is not new. AmigaE has allowed you to do that for a good while now and AmigaE also allows object oriented programming, but then AmigaE is an advanced programming language. Secal seems to be aimed at people who want a more straight forward language that makes it quick to develop games but from a professional environment still gives full access to the Amiga's operating system and if you really want, direct access to the hardware.

I would say this is more for the semi-experience programmer, perhaps if you have already dabbled with Amos or Blitz and need something more advanced. The price is excellent but with only a few example programs to show you how to use the external libraries, the absolute beginner would probably struggle.

AG

## Bottom line

### REQUIREMENTS

RED essential

BLACK recommended

2.04

Workbench



Hard drive

### PRODUCT DETAILS

|          |               |
|----------|---------------|
| Product  | Secal         |
| Supplier | OTM           |
| Price    | £34.99        |
| Tel      | 01827 312 302 |

### SCORES

|                 |     |
|-----------------|-----|
| Ease of use     | 85% |
| Implementation  | 90% |
| Value For Money | 93% |
| Overall         | 89% |

**I**n a fit of nostalgia the other day I flicked through some old issues of *Amiga Computing*, and was alarmed to find that my tenure as PeeDee ubermeister has spanned nearly three years. I'd like to be able to say that it seems like it was only yesterday that I tentatively urged my first submission into the drive, but I'd be lying.

Much has happened in that time. Once a proud computing galleon, the good ship Amiga has spent the best part of the mid-90s in the choppy ocean of uncertainty, occasionally appearing to remain afloat only thanks to valiant bucket work from its loyal sailors.

With all this in mind, I decided this month to introduce a new slant in Public Sector, highlighting some of the best and the worst PD and Shareware software which has graced my humble floppy drive over the years as well as the cream of the new releases – if you will, a veritable plethora of PD both past and present.

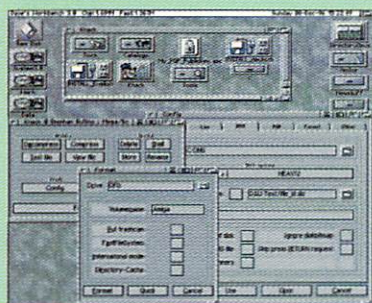
## KNACK

**Programmed by:** Stephan Bulling  
**Available from:** Classic Amiga Software  
**Disk No:** UT 200

The curiously named Knack is in fact a GUI archiver with a few extra features thrown in for good measure. It can pack and unpack files in DMS, Lha and Lzx formats. It is also capable of encrypting files using PGP, formatting disks and displaying text files, all through the use of external programs which can be specified on the preferences screen. The packing programs themselves are included on the disk, in case they are not already in place on your hard drive.

Knack requires the ever popular Magic User Interface, and consequently its interface is attractive, clear and configurable. The use of MUI means the program can be easily iconified and then called back with a quick click of the mouse. Knack also acts as a commodity, so it can be recalled or iconified from within Exchange.

Although it is by no means an essential program in that there are plenty of other GUIs around fulfilling similar roles, Knack is attractive and simple making it worth a look.



**Knack: compress files with ease, and perform some other everyday operations whilst you're about it**

# public sector

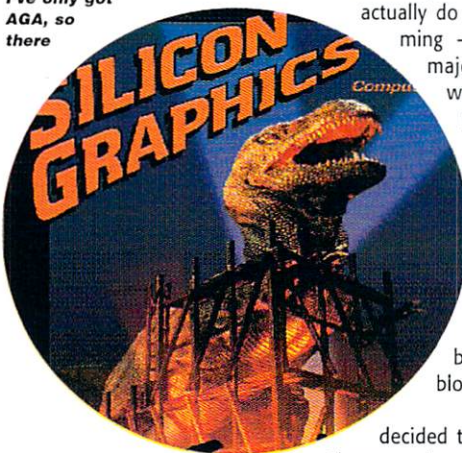
**PERFECT PEEDEE PAST...**

## IMAGESTUDIO 2

**Programmed by:** Andy and Graham Dean  
**Originally reviewed:** Issue 87 (June 1995)  
**Available from:** demo from PD libraries or Aminet; commercial version £15 from LH Publishing

When some Shareware authors receive a poor response to their requests for users to register, they decide enough is enough and simply don't bother in future. Anyone brave enough to admit they remember Moose Drive will probably be glad to know that it was the first and last Shareware program I was involved in producing. I didn't actually do any programming – indeed, the majority of the work on that project was done by a friend of mine by the name of Graham Dean. Since then, Graham has been a busy bloke.

**Version 2.3 supports CyberGraphX... but I've only got AGA, so there**



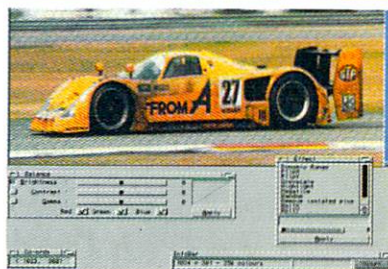
While I decided to write about Shareware instead of actually writing it, Graham stuck with programming. After learning C he teamed up with his brother Andy to create an affordable but powerful Image Processing program. The original ImageStudio appeared in late 1994 and was warmly received by the Amiga press.

Hundreds of users registered and the considerably rewritten follow-up arrived a few months later. Soon after, LH Publishing took over the distribution of the program from Graham and Andy so that they could concentrate on other projects in their spare time – namely the Shareware TextureStudio and the recently released commercial package DrawStudio.

ImageStudio has proved so popular because it offers a great many features which were previously only found in expensive packages such as ImageFX and Photogenics. Through a beautifully simple interface the user can crop, texture and con-

## Dave Cusick

snubs the January sales and opts instead for more cheap and cheery software



**ImageStudio offers power at an eminently affordable price**

vert images, play around with the brightness and contrast, and perform a wealth of other operations. All the major image formats from all platforms are supported, as are sub-formats such as Transparent and Interlaced GIFs. ARexx support enables complex scripts to be developed, allowing users to automate complex series of operations so that they can be performed with a single click of the mouse.

A particularly innovative feature is the use of virtual memory as standard, with previous versions of the current image being stored on your hard drive. You can choose how many levels of undo and redo are available, so that if you perform a series of operations on an image and then decide the results are unsatisfactory, returning to the original image is a simple matter.

Since the release of version 2.0 several updates have appeared adding more features. These are available either from Public Domain libraries or from the ImageStudio web pages at <http://www.ajdean.demon.co.uk/>. The latest release is v2.3, which incorporates full support for the CyberGraphX graphics standard and brings a printed manual into the bargain for registered users. To be honest, it is hard to see how the program could really be improved any more. Right from its initial release ImageStudio has been extremely stable (I know – I was a version 1.0 beta tester) and there are no obvious omissions from its impressive armoury of features.

The bottom line is that over 18 months after its initial release, ImageStudio 2 remains one of the best Amiga image processors around. It can handle everything most people will ever need to throw at it and, with registration only costing £15, it represents excellent value for money.

## PATHETIC PEEDEE PRESENT...

## DANGER DOG

Programmed by: Virtual Vagabonds  
Available from: Classic Amiga Software  
Disk No: G 418

When I came to thinking about the worst software Public Sector has ever had the misfortune to investigate, I actually found myself in quite an interesting position. I generally don't review poor software in these pages, preferring to devote the space to more deserving programs; and besides, some of the least useful disks the column has been sent in the past have, I confess, found a more meaningful existence as blank floppies in times of need. For that reason, and I suppose because I have a strange and perverted sense of humour, I yelped with glee when I rammed this disk into my trusty 3.5" a couple of weeks ago.

DangerDogg is a platform game, and a rather feeble one at that. In the words of the German authors, "If you want complete a level you must move Doggy over all objects he must give the colours back." (Well, quite). This is rather more demanding than it initially sounds, principally because Doggy himself responds about as much to

Let's go!

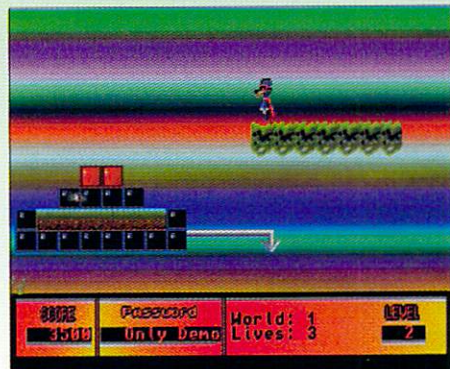
Let's not

your joystick as government policy does to popular opinion.

Doggy leaps about (or, more often than not, plummets to his death) against a horribly garish backdrop, and to the accompaniment of suitably weedy sound effects. His movements are so singularly graceless, his animation so wholly pathetic, and his range of actions so incredibly limited that not even the most action-starved games fan could fail to be unimpressed.

DangerDogg is painfully unplayable, utterly devoid of originality and completely uninspiring. From the pointless introductory screens with a digitiser to satiate his dog-related desires?) to the appallingly flawed gameplay, this game is, not to put too fine a point on it, dismal.

This leaves the self-respecting PD aficionado two choices. The first is to avoid it like the plague; the second is to download it, laugh hysterically, and then delete the files from your hard drive one by one. I'd opt for the second option – not only is it an education, but it's far more satisfying.



DangerDogg: bobbins, on a stick

## STAR DEFENDER

Programmed by: Matthias Bock  
Available from: Classic Amiga Software  
Disk No: G 402

When I was but a child, I would regularly return from one of my not infrequent parentally accompanied shopping trips in Macclesfield with a small cassette in a Bailey's carrier bag. From the outside, Bailey's appeared for all the world like any other toy shop, but for a small proportion of the population in the Macclesfield area, it offered far more: an Acorn Electron budget games rack.

Over several years I accumulated a scarily large collection of £1.99 and £2.99 gems, many from the Micro Power stable – programs which had for the large part been taken from

listings in the pages of *Electron User* magazine (which way back in the mists of time was produced by Database Publications, which became part of Europress, which became part of IDG. It's a funny old world). The vast majority of these were standard budget fare, playable for a couple of hours before tedium set in whereupon they would be consigned to a shelf forever. Some, such as Gauntlet, were not.

The Gauntlet of which I speak was not, as might initially be thought, a conversion of the Atari arcade game. It was in fact a Defender clone, although being a mere slip of a lad I was totally unaware of this at the time.

At first I had been disappointed with my new purchase – a month's pocket money invested in a game which appeared so fiendishly difficult that my friends and I found it difficult to last more than a few seconds. Then, on a Christmas family visit,

The magnificently  
playable Star  
Defender

| STAR DEFENDER              |           |   |   |             |
|----------------------------|-----------|---|---|-------------|
| PRESS FIRE OR F10 TO START |           |   |   |             |
| HALL OF FAME               |           |   |   |             |
| *****                      |           |   |   |             |
| X                          | NAME      | P | G | L SCORE     |
| *****                      |           |   |   |             |
| 1.                         | STARFOX   | 1 | 1 | 007 0067475 |
| 2.                         | ANONYMOUS | 1 | 1 | 001 0001075 |
| 3.                         | ANONYMOUS | 1 | 1 | 001 0000900 |
| 4.                         |           | 0 | 0 | 000 0000000 |

Why can't all  
games be this  
addictive?

my Electron-owning cousin's Gauntlet prowess etched such an indelible mark on my easily influenced young mind that I swore there and then that I too would become a Gauntlet God.

Many hours were spent hunched over that beautiful beige keyboard, my little fingers struggling to master the awkward key combinations and my reactions fighting a losing battle against the hordes of marauding aliens. And lo, as days turned to weeks, my mastery of this arcade classic grew. I topped the hiscore table, and eventually succeeded in registering a score so high that I had completed the game twice over before finally succumbing to a hurtling mutant.

Of course, all this was so long ago that my Defending brilliance has since paled significantly. The passage of time has tempered my reactions, and the joystick is simply too modern an innovation for hands that were baptised in all things digital right back at the dawn of home computing.

But despite my current ineffectual Gauntleteering, I can see in Star Defender echoes of that addictive, fluid gameplay which ensnared me during my formative years. The graphics might be positively 8-bit, but the action is so unrelenting and the pace so blistering that few could fail to be enamoured with this Amiga-ised blasting frenzy. One to invest in, methinks.

# GIF TOOLKIT v1.4.1

Programmed by: Stephan Schupfer

Available from: home page at

[http://www.sbox.tu-](http://www.sbox.tu-graz.ac.at/home/schupfer/GIF-Toolkit/)

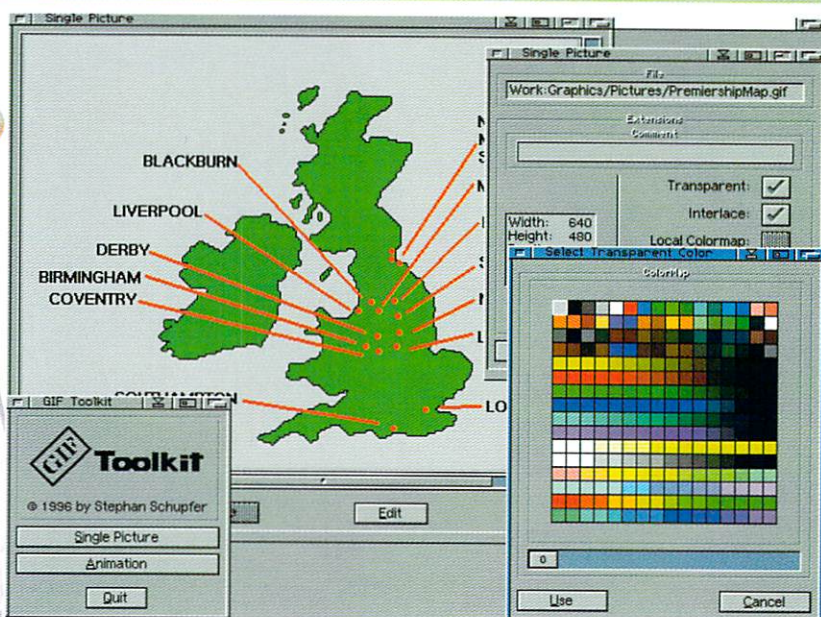
[graz.ac.at/home/schupfer/GIF-Toolkit/](http://www.sbox.tu-graz.ac.at/home/schupfer/GIF-Toolkit/) -

and possibly on Aminet soon

With the increasing focus on the Internet throughout the computing world, and especially on the World Wide Web, programs capable of manipulating GIF images are becoming ever more valuable. Several image processors, such as ImageStudio (reviewed again elsewhere in these pages), are capable of handling Interlaced and Transparent GIFs, but when it comes to dealing with GIF animations the choice of programs is rather more limited - there's the shell-based WhirlGIF to create them, and IBrowse to view them with. And that was about it, until this little offering came along.

The marvellous MUI-based GIF Toolkit offers support for every type of GIF 89a file imaginable, including animations. In single image mode, after loading in a picture the program will display it in a scrollable window on the allocated public screen. It is then possible to play around with the image, making it interlaced or transparent, and choosing the appropriate background or transparent colours using attractive requestors. Alternatively you can create or view animations using a separate straightforward but comprehensive requestor.

**GIF Toolkit makes creating transparent and interlaced GIFs and GIF animations a straightforward task**



Using GIF Toolkit is infinitely easier than grappling with WhirlGIF, so if you need to create GIF anims there's simply no better Amiga program. On the down side, at times it can be painfully slow to use on less powerful Amigas - quite probably as a side effect of using MUI. Certainly 020 owners will find themselves twiddling their thumbs rather too often for comfort.

GIF Toolkit is a Shareware program, and

the freely distributable demo version doesn't allow you to save your lovingly created efforts. The registration fee is 35DM (or its approximate equivalent in a range of currencies - Mr Schupfer has certainly offered enough ways to pay...). Its price might deter the casual GIF animator but if you're likely to be doing this sort of thing regularly, GIF Toolkit is well worth investigating.

## FIREFLIES

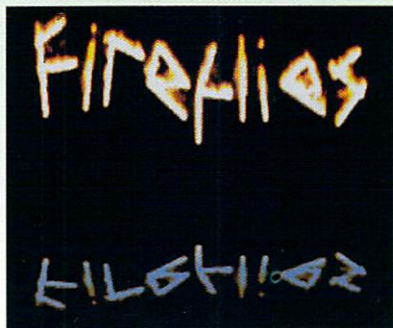
Programmed by: Philip Holden

Available from: OnLine PD

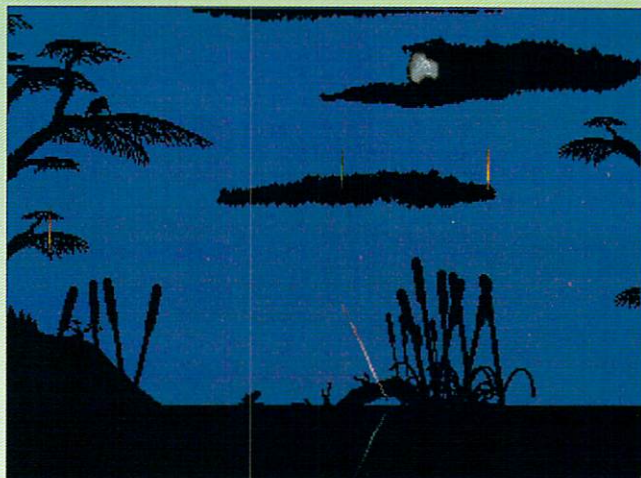
Disk No: OG 293

New ideas for games are, unfortunately, something of a rarity these days. Once upon a time radical new diversions such as Lemmings or Populous appeared on a fairly regular basis, but these days precious few novel gaming concepts are in evidence on any format - least of all our beloved but beleaguered Amiga. Therefore, whilst Fireflies cannot boast stunning graphics or sound effects and is probably not the most addictive game ever to grace the average Microvitec monitor, it certainly deserves commending for originality if nothing else.

Up to five players can participate in the



**Fireflies: a new gaming concept**



**Graphically stunning Fireflies isn't, but original it most definitely is**

action. Each assumes the role of a firefly, racing around the skies above a pond during the hours of darkness. The objective is to send the other fireflies plummeting to their death by forcing them to career headlong into you as you hover in the darkness. The fastest moving firefly in any collision is temporarily stunned and will begin falling towards the waters below where, if he cannot recover fast enough, he will be consumed by a hungry frog. All this doubtless sounds fairly bizarre; suffice it to say it makes for a fairly entertaining game when in company.

Also deserving of a mention at this point is the fascinating ReadMe which accompanies Fireflies. The author has outlined a series of

potential improvements to the gameplay which could lead to what would effectively be an online ecosystem, with people controlling fireflies, frogs, birds, pike and tadpoles. Mating would be possible as would a degree of social interaction. All this sounds remarkably fascinating and, if any of this ever comes to be realised, a networked Fireflies could definitely be something to watch out for.

Overall then, whilst it is unlikely to appeal to anyone for a vast length of time in its present form, this game is absolutely brimming over with potential and is praiseworthy for this alone. The fact that it can be hugely entertaining when there are several players to hand is simply a terrific bonus.

## A DESIGN FOR LIFE

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable Public Domain, Shareware or Licenceware, if you feel it is of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste.

Although Public Sector cannot possibly hope to cover all submissions, I promise I'll at least look at your work - even if it is yet another Lottery program or Klondike cardset. It does make my job a lot easier though if disks are clearly labelled. Please also include a cover letter detailing the disk contents and price, and giving some basic instructions. The magic address is:

Dave Cusick, PD submissions  
Amiga Computing, Media House  
Adlington Park, Macclesfield SK10 4NP

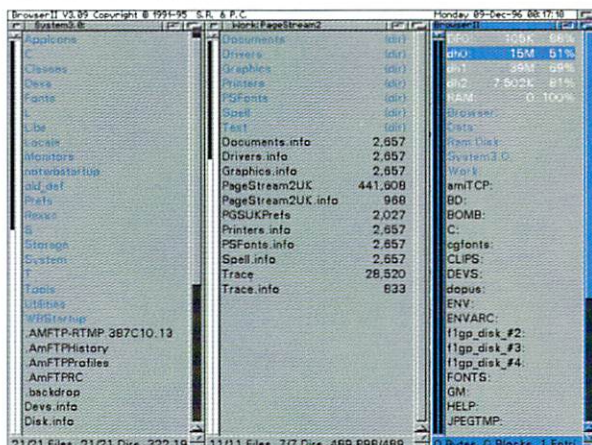
## BROWSER II v3.09

Programmed by: Pierre Carrette  
and Sylvain Rougier  
Available from: OnLine PD  
Disk No: OU 350

Brilliant though it is as Windows, Icons, Menus and Pointers systems go, Workbench can still be irritating at times, hence the popularity of file managers such as DOpus and FileQuest (which was reviewed last month). Browser II goes one step beyond these file managers. Rather than being limited to two windows, it allows multiple windows to be displayed at the same time, all containing a wealth of information about files.

It operates in a similar manner to Workbench, in that files can be dragged between windows and then dropped to copy them. It is capable of executing programs at the press of a button. Menus can also be created, meaning you can ensure your most frequently used commands are available at the click of a button (or the pressing of a hotkey).

Browser II features asynchronous file operations (something Workbench itself cannot boast!), full multi-user/network support, the



**Browser:**  
potentially you need  
never have to use  
Workbench again

ability to display and deal with the contents of archives as if they were ordinary directories, and a great deal more.

In short, Browser II could completely replace Workbench for many Amiga users. At first, everything seems a little alien, a little confusing; but after playing with the program for a short while, it becomes clear that it has a great deal to offer.

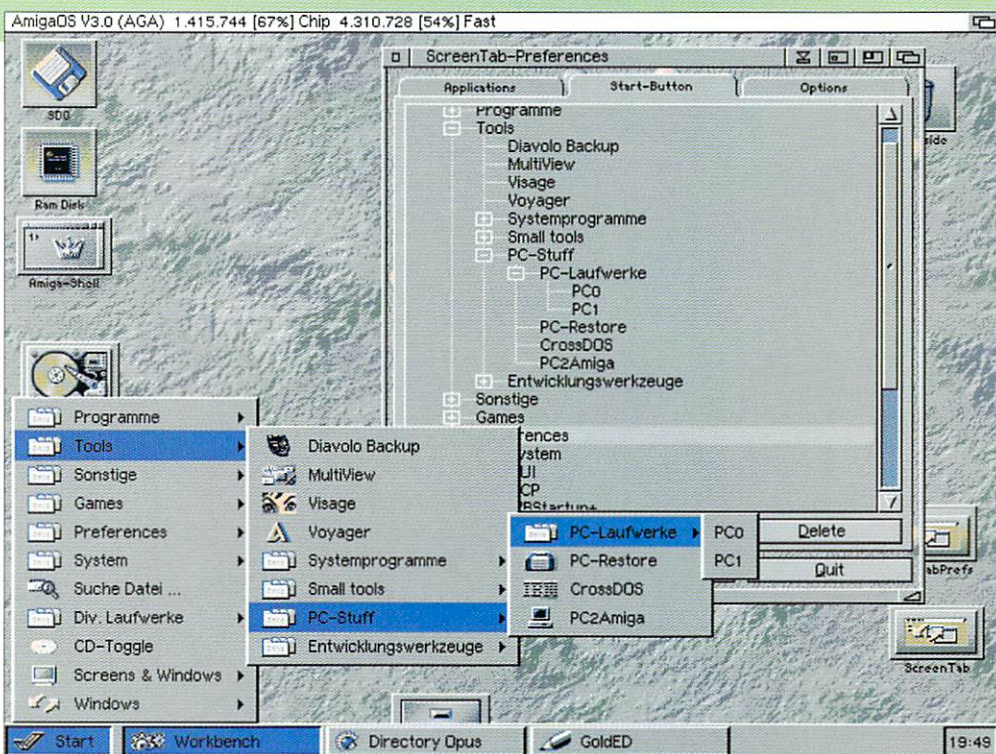
## SCREENTAB

Programmed by: Michael Link  
Available from: Aminet

For a long time Amiga owners have ridiculed Windows, Microsoft's attempt to drag the PC into the 1990s. However in recent months it seems programmers have been keener to emulate than humiliate, because Aminet has been positively jam-packed with Windows 95 taskbar emulators. Possibly the best yet is this rather superb utility.

Run as a commodity, Screenshot calls up a lovely font-sensitive taskbar whenever the mouse is moved to the bottom of the screen. This taskbar enables the user to quickly flick to any currently open screen, or to run a program by selecting it from the Start menu (yes, that's correct, the button which featured so prevalently in Microsoft's dreadful Rolling Stones-accompanied adverts a year ago).

ScreenTab is Shareware, and the registration fee is 10DM. With a beautiful MUI preferences program available to allow easy configuration, a host of added extras such as "Plug-ins" and much more to offer, ScreenTab really does have everything going for it. The taskbar itself is one of the more useful aspects of the Windows 95 interface and you won't find it more brilliantly implemented on the Amiga.



ScreenTab: here's one the author prepared earlier, which illustrates the power of this great program

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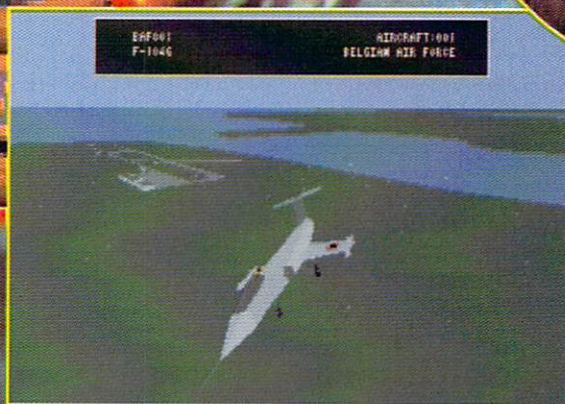
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# AMIGA ACTION

**Vulcan Software Reveal All!**

## ***Vulcanic activity!***



# AMIGA ACTION

## news

By **Hugh Poynton**

### ANGLO GO FOR ESCOM

The announcement by Anglo that they wish to buy 19 Escom stores and reopen them under the Silica name could be good news for Amiga owners. Since Escom went bust last year the stores have remained boarded up. In the past Silica have supported the Amiga considerably by stocking Amiga hardware and games.

So keep your fingers crossed, who knows you might get one on the end of your street!

### WHITE DEATH

Fancy re-enacting the massive encirclement battles that killed millions of Germans and Russians alike during the Second World War and led to the starvation of thousands of Russian civilians? Well, you're in luck, because Guildhall Leisure has released a budget version of the 1988 wargame White Death.

It focuses on The German invasion of Russia during the Second World War, so if you're an Amiga wargamer who doesn't get depressed easily why not snap up this bargain? For further details contact Guildhall Leisure on 01302 890000

### MAX RALLY

Teenage software team Fortress is all set to release its first commercial release early in '97. Max Rally will be compatible on all Amigas with 1.5 Meg of RAM and above. The game is a four player racer that aims to redress the failings of other multiplayer race games. Fortress tells us that Max Rally will only be available via mail order and will cost no more than £14.99.

For more information phone Fortress on 01902 834065

### THE ENFORCER

Spring will see the release of Vulcan's new Doom clone, The Enforcer. Work on the project so far is quite advanced and from what we've seen of the game, it promises to be one of the best Doom clones for the Amiga. Unlike many previous attempts at Doom clones, The Enforcer runs at a good speed without you needing to reduce the view window down to the size of a postage stamp. For further details contact Vulcan on 01705 670269



Teenage Kicks - Max Rally

### HELL PIGS

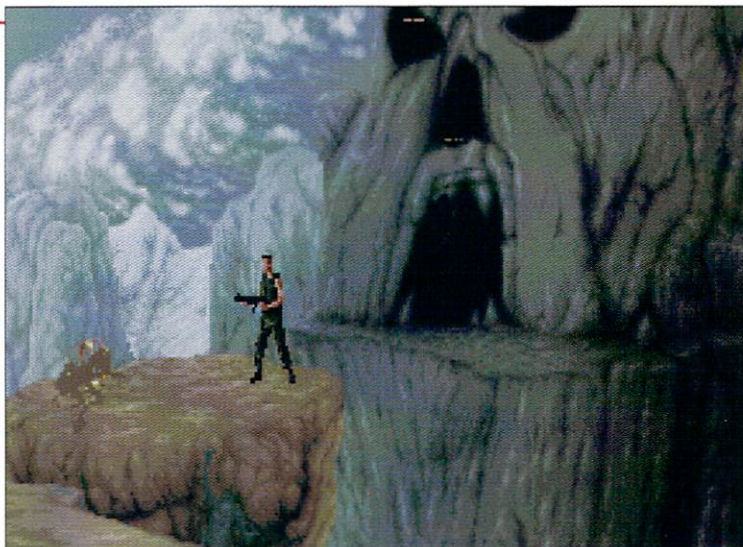
By the spring of 1997, Vulcan will introduce the world to The Hell Pigs, what it believes to be the biggest graphic adventure game ever. The Hell Pigs will be released on floppy a month before being released on CD - 22 to be exact.

The game takes up a staggering 20 Mb, so your machine's going to have to be pretty souped up to run it from the hard drive.

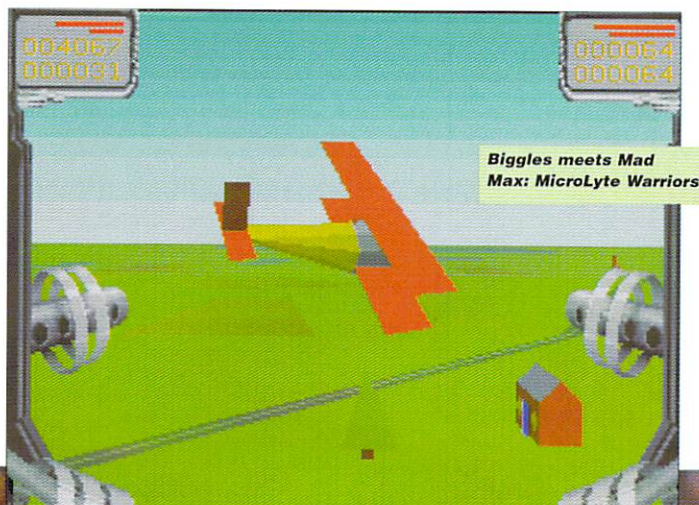
Hell Pigs follows four hard blokes as they investigate a recent UFO visitation. Your job is to guide these four Mitchell brothers-a-likes through dangerous caverns and bases. The floppy version offers a filmatic scripted storyline, excellent back drops and character animations, while the CD will have full motion video and actor speech throughout - your own interactive movie no less.

Vulcan has also taken the unusual step of voluntarily giving Hell Pigs game an 18 certificate because of the game's strong language and violent scenes. From this information it sounds like it might well turn out to be some sort of a weird cross between the X Files and Platoon.

Hell Pigs is due out sometime during spring '97, so keep your eyes peeled - we'll get a review done just as soon as possible...



From this screen shot it looks like Hell Pigs uses backdrops from Scooby Doo



Biggles meets Mad Max: MicroLyte Warriors



## UNPUBLISHED. WHY?

You would have thought that in times like these, any software company that still publishes Amiga games and has a gram of sense would be snapping up the best efforts of the software developers out there. This is seemingly not the case.

While looking for games to review this month we noticed a couple of games that were due for release from a couple of pretty well known games companies. We found demo versions of each on the Aminet and phoned about asking if I could do reviews on the two games. The answer was that I'd just have to ask the developer because it no longer had anything to do with the projects. The first was a sequel to an old Amiga favourite...

Fabio Bizzetti's Virtual Karting caused a bit of a stir when it came out last year. Now, Fabio has come up with Virtual Karting Deluxe, a stunning looking sequel. Unfortunately, Fabio has been unable to find a publisher, so the only way you will be able to find this game in the near future will be on the Aminet.

Although not totally devoid of bugs, the demo is an excellent looking game. The graphics are top quality, the carts responsive, and the sound is excellent (the high pitched 100 cc engines actually do sound like one of those irritating Honda scooters).

The second game was an ace little flying shoot 'em up called MicroLyte Warriors. It provides you with the opportunity to fly 'Catch the Pigeon' style planes around a landscape chock full of fanciful buildings and huge windmills. We're not sure if there is a plot to the game, and frankly, even if there was it would be totally irrelevant. The fun of this game is that it is pure arcade fun.

You pit your microlyte craft against three other opponents; two are controlled by the computer, and two can be flown by human players (of course three are flown by the computer if there is only one human player). This can be immense fun, flying around in your flimsy looking biplane, shooting down your mate's ornithopter (sorry, being technical - wing flapping plane to the layman).

Let's hope these two games get themselves publishers because they are both great fun, and projects that with a little investment would sell like hotcakes.

*Absolutely Fabio*

## BOULDERDASH 3D

In a similar vein Silltunna is currently deciding what to do with its scheduled Christmas release, Boulderdash 3D. Doubt now lingers over the release of this fun 3D 'doom in a hovercraft' puzzler. For further information call Silltunna on 0114 285 4932



Unfortunately the baddies in Boulderdash look far too cute to be scary.



Boulderdash 3D is a little more colourful than Quake

Your lovely little hover car

# ACTION REVIEW

## SHOOT-'EM-UP

It's a couple of years since the Bitmap Brothers released its smash hit The Chaos Engine and the game sold like hot-cakes because of the blend of playability, superb graphics and sound. The long awaited sequel, cunningly entitled The Chaos Engine 2, will be released this Christmas, virtually assuring the Bitmap Brothers another runaway success.

The story is simple enough. Professor and mad bloke extraordinaire Baron Fortesque builds a time machine which he christens The Chaos Engine (it's got to sound sinister and scary – you couldn't be calling your time machine The Luv Bug could you now?)

This cowboy contraption blows up because he's been using dodgy spare parts or something and four hapless characters are lost in time. The only way they can get back is to help Fortesque rebuild his dodgy machine. The one who makes the greatest contribution and gains the most points is granted his freedom.

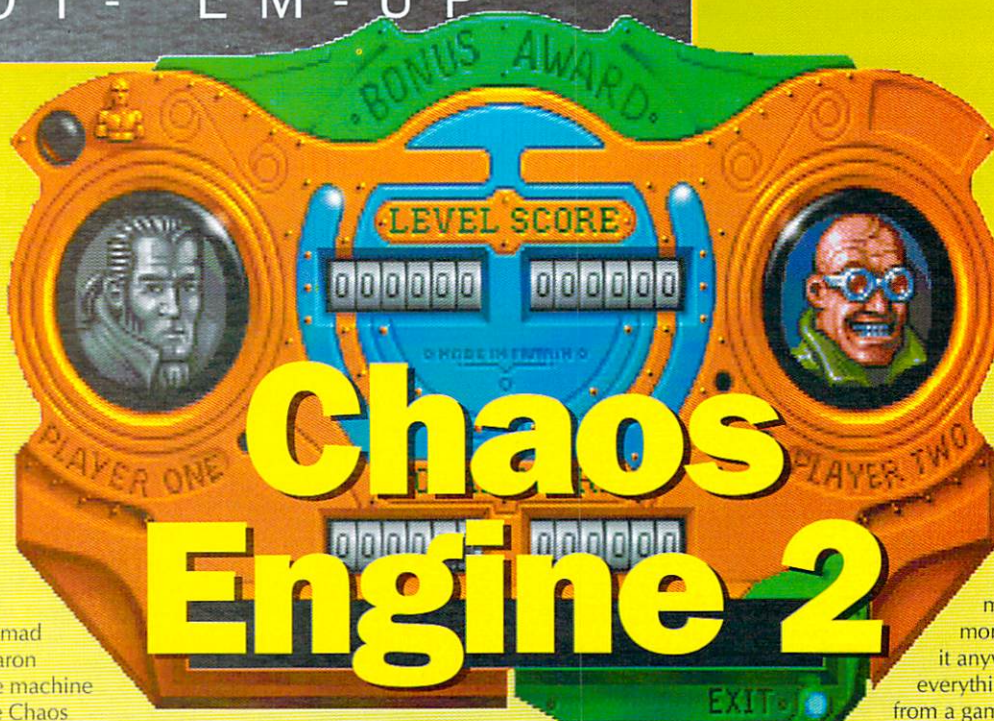
You can choose to be one of four characters: The Gent – a pretty swish looking character with a pony tail (always a sign of quality) and a trench coat. Despite being armed with a pistol, he relies more on his sense of cool to keep him out of danger.

Then there is the Navvie – a bloke who looks like Bob Hoskins with a Zapata moustache and a lanky mop top. The slightly boring Brigand just looks shady and nondescript and finally, there is the Mercenary. It's not easy describing this guy because he just looks plain bizarre. The closest I can think of would be a grown up Charlie Brown with a psychotic grin and a pair of extremely thick Coke bottle bottom glasses.

Many things remain relatively unchanged from the original Chaos Engine. However,



Its celebrity Chaos Engine! The Marti Pellow/Duncan Goodhew deathmatch



**Right, outside now! Hugh Poynton takes on four hard blokes. And loses.**

unlike the original, CE2 puts more emphasis on having two players competing for the same prizes which adds considerable pressure and excitement to the game.

The aim is also pretty much the same as the original – pick up as many bonus points as possible and find the key that enables you to leave that level and exit before your opponent. Sounds simple? Well it's anything but – when you're going head to head Quakewise with another opponent in a battle arena already packed with bad guys, the game gets very challenging.

Your success in the game is now much more dependent on tactics – you can play the game with all guns blazing making sure your opponent is constantly under so much fire he won't pose much of a threat. Alternatively you can hide and mug the guy when he steps in your direction.

Chaos Engine also includes a number of those little touches that add to a game. For instance, when your character runs out of ammo and you press your fire button, the little bloke faces the screen and gives a big comical 'ah well' type shrug. If you are trying to dodge enemy fire, the characters can flatten themselves against walls in a 'Starsky and Hutch in a gunfight' fashion. Another touch differing from the original Chaos

Engine is that you can run up stairs and jump down from parapets, adding (literally) another dimension to the game.

Chaos Engine 2 is a great game. If you don't have the original, go and buy this. If you do, it differs sufficiently from the original to make it worth the money, so go and buy it anyway. There is everything you'd want from a game here. The graphics are smooth and flowing, the action non-stop and there is a huge amount of playability.



Handsome bloke that Baron Fortesque. Almost fancy him myself

## THE LOW-DOWN

**PUBLISHER** Time Warner Interactive  
**DEVELOPER** The Bitmap Brothers  
**CONTACT** 0171 702 3643  
**PRICE** £29.99  
**DISKS** 3

|                    |     |
|--------------------|-----|
| <b>GRAPHICS</b>    | 90% |
| <b>SOUND</b>       | 89% |
| <b>PLAYABILITY</b> | 92% |

REVIEWED BY HUGH

**OVERALL SCORE**

**92%**

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## ACTION REVIEW

### PUZZLE

**Hugh Poynton baby-sits Vulcan's latest cute 'n' slimy critters.**

# Busting for the BOG

**W**hen opening the Bograt box, I thought to myself, 'a new scrolling platform game, that'll be nice, unchallenging and relaxing to play on a Thursday afternoon in the office'. I've got news for you. It wasn't unchallenging or relaxing, indeed it was probably more challenging than trying to pull in a nunnery.

Vulcan's new release Bograts is without doubt one of the most deceptively hard arcade puzzle games I have ever played. Trying to work out how to get through the 60 levels of simple looking, yet bloody hard, screens uses as much brain power as Einstein used to figure out that whole

relativity business.

Although it looks like a cute arcade game it is rather more. The baby bograts you guide through the different levels behave exactly like the little rodents in the classic, Lemmings.

Oblivious to danger, they just walk into any obstacle waiting for them. The only hint as to where the baby Bograts are going to go is that they walk left and then right. With this in mind, you can attempt to selectively open strategically placed doors and remove certain obstacles in front of them so as to avoid the various dangers.

Stupid as they may be, these baby bograts

aren't just an annoying liability, they do serve a purpose. Both babies have special skills. Despite looking cute, the blue baby bograt is actually as hard as nails. If you run into any Fungus creatures, blue bogster will dispatch the rum fungus lad with a blood curdling roar.

Red baby bograt is as hard as marshmallow but is the only one of the three characters who can pick up keys and unlock doors. More importantly, there are large sections of the levels only accessible by the baby bograts so you must plan ahead and get them to reach whatever you can't. Each screen requires an entirely different strategy and it really is worth perusing the screen for a couple of minutes first.

If you get to level two and think things are difficult, wait till you get to ten - there are 60 levels in total. A couple of days playing this and you'll be doing pretty accurate Mr Gumby impressions - my heeeaaaaaaddddddd huuuuuuurrrrrttss!

The sound effects are brilliant, whenever you jump up and collect something, be it a heart or an egg, a little daaannngggg noise sounds. Run into a big bunch of eggs or hearts and the game suddenly sounds like its got a drum'n'bass sound track. Your teleport to the next level is always heralded by a little bograt baby making a noise like a cross between a hiccup and a full on chunder. Worse still when the bog babies shuffle their mortal coil they make a weird and rather distressed miowwww noise.

Graphic-wise the game is well presented and original. It has loads of fun little features that make it stand out from standard scrolling platform games. Hidden about the various



Ub mub bub, bah bbah eeeyyaaaaaaa...(too grief stricken to speak)



This is the Bograt mum - she looks like something I wiped down the side of the sofa the other day



I spent hours trying to work out if it is the front or back legs these little critters are missing. Answers on a postcard please



Note the lovely portrait of Auntie Hilda downstairs



This is level two and it took me half an hour to get here. Lucky I never went into brain surgery

levels are springs which shoot you across the screen at supersonic speeds, flames which suddenly flare up and roast you to a crisp and big red blocks that can be shoved into strategic locations to prevent the baby bog rats getting themselves killed (careful where you drop them, it's a bit gutting to drop a brick on your little bogsters).

Another bonus is the ridiculous, but hilarious, introduction animation. It shows the two bograt babies being read a fairy tale by their mum. Mommy Bograt is speaking in the most stupid sounding gobleddegook heard since Mr Blobby. For example: 'Umum umum, ajurp, urp baya, urp baya'. This cross between burping, grunting and breaking wind is followed by a long rather dodgy sounding sigh. What the developer was on I don't know, but I want some.

My main criticism of Bograts is that it can be just too hard - to the point of being really annoying. However, do bear in mind that I'm the bloke who spent the best part of a year trying to complete solitaire. I found after my first hour trying to figure out how to guide the baby bograts through five measly levels I wanted to head-but something.

Completing all 60 levels of Bograts would probably be more difficult than completing Quake.

Bograts is well up to Vulcan standards. The game is fun, massively challenging (for a spanner like me) and the concept is pretty original. With so many levels (all no doubt rock hard) to complete, there is little chance you would finish this game within about 6 months. Bograts is a tough, fun and instantly addictive game. Go buy it.



If you've got this far you're brainier than me. Or you spend too long on your computer



From this screen shot Bograts looks simple - don't be fooled

## THE LOW-DOWN

**PUBLISHER** Vulcan Software  
**CONTACT** 01705 670269  
**HD INSTALLABLE** Yes  
**PRICE** £12.99  
**MACHINE** A1200 only

|                    |             |
|--------------------|-------------|
| <b>GRAPHICS</b>    | 80%         |
| <b>SOUND</b>       | 85%         |
| <b>PLAYABILITY</b> | 90%         |
| <b>DIFFICULTY</b>  | Very Tricky |

A deceptively tricky little puzzler. Great fun to play unless you're highly strung or prone to losing your temper pretty easily. Be warned, it isn't just a dumb shoot 'em-up, so you might have to use your noggin for a change

**REVIEWED BY** HUGH  
**OVERALL SCORE**  
**85%**

## ACTION FEATURE

### INTERVIEW

# Vulcanic

**B**ack in 1994, a small Portsmouth-based software company consisting of Paul Carrington and Lisa Tunnah started out in the, then, fairly prosperous Amiga games market. Two years later, the games market has dwindled as software developers scrap or phase out projects for the Amiga. Vulcan however, are still developing and selling a range of Amiga games that would have been impressive even five years ago. Although only launched two years ago, Vulcan now hold 70% of the Amiga games market; how? I talked to Paul Carrington, the man behind Vulcan.

*When Team 17 brought out Worms; The Director's Cut this month, it was, so they tell me, their final release for the Amiga (apart from add-on disks and patches). You currently have 10 Amiga titles in development or ready for release. What has prompted this great support when everybody else is calling it a day?*

The main reason is that we are unique in our operations. If we were simply developers who handed titles to our publishers, we would probably be looking at other, more widespread platforms for which to develop. But in our entirety we are developers, publishers, manufacturers, distributors and offer world wide mail order.

**Hugh Poynton talks to Paul Carrington, director of Vulcan Software – currently the largest Amiga Software producers – about new games, the future of the Amiga and why his company aren't feeling the 'Amiga pinch'**

All these elements combined mean we are self sufficient and don't rely on normal commercial routes to sell our products. In a sense we have written our own rules and because of this have never felt the 'Amiga pinch' like other software houses.

One thing to bear in mind is that a lot of Amiga users and games players are still out there, knowing that the Amiga is not represented as much as it used to be (or hardly at all) at wholesale and retail level (especially in the UK). But this was dictated by market changes.

As the new Amiga hardware (in my opinion) hit the marketplace a bit too late, the damage was already done – developers and publishers clambered for the next boom market and left the Amiga dry.

Vulcan were in a unique position of entering the computer market at the beginning of the Amiga decline and through sheer stubbornness chose to adapt our operating procedures to suit. Right from the beginning we realised there would be a niche left by the evolution and we jumped in it as quickly as we could and sealed the entrance

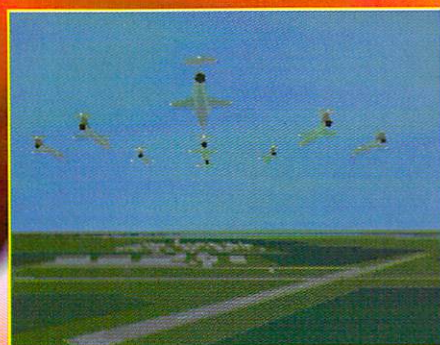
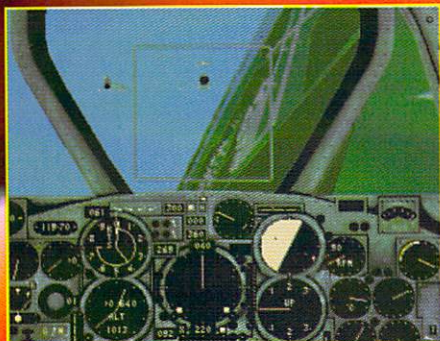


Bograts



Bograts

# Activity



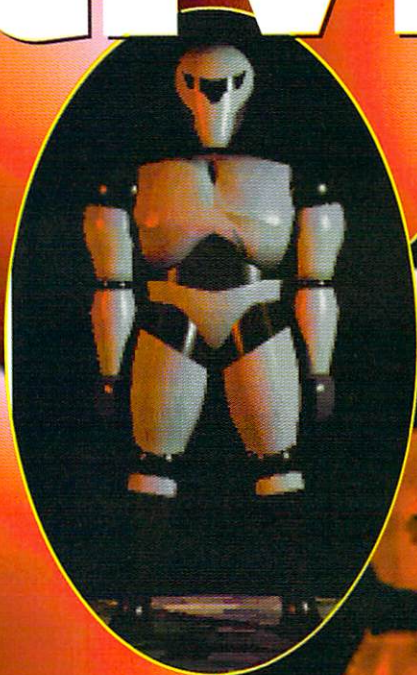
Starfighter

tight.

It was a struggle at first and quite frightening the day we decided to withdraw all our titles from mainstream wholesale and distribution but we held on and now we are proud to say that we are the biggest publishers/developers for the Amiga market.

In a nutshell, there is no reason for us to leave the Amiga platform. As long as we control 70% or more of the Amiga's future software we are in a position to support it for as long as the loyal owners dictate. In essence it's a lovely balance and a good thing for the Amiga's future as localisation of Amiga software breathes new life into the overall picture.

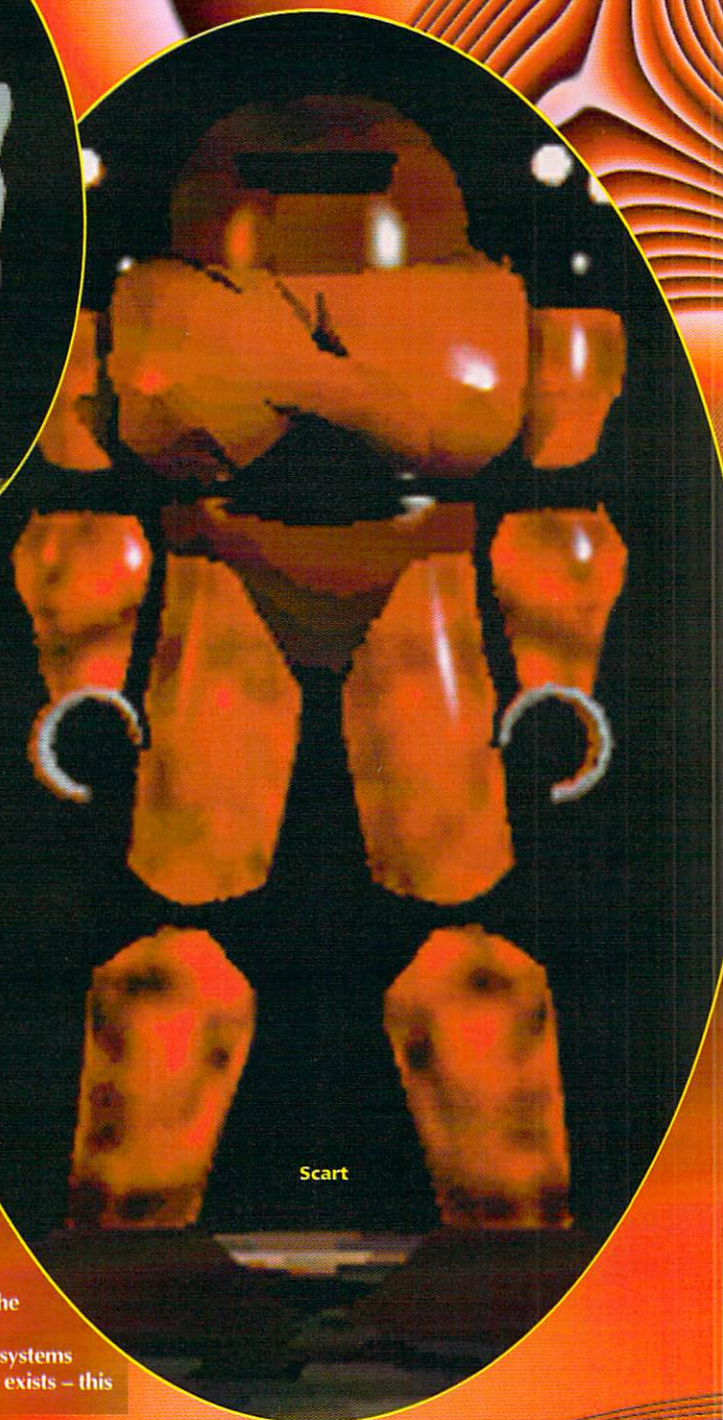
*What do you think about the news that Phase 5 want to invest in the Power Amiga? Will this bring about a renaissance of Amiga gaming? If this is the case, what would be your ideal game to bring out on the new format? If this investment and development comes to nothing, what will the future hold for the Amiga - can it survive?*



Can it survive? So far it has, so there is no reason why it can't continue to do so.

I'm always dubious about 'news' of this and 'news' of that. Commodore, Escom and Viscorp were (and are) full of glorious 'news' but sooner or later news is not so interesting as actual hard fact happenings. Now I only get excited when it's accomplished and staring me in the face.

If it were to transpire that a new power Amiga emerged I don't believe it would revolutionise the Amiga market. There are already other power machines around with a lot of software support. I believe that the way forward for the Amiga is for dedicated users to upgrade their systems with the hardware that currently exists - this



Scart

Hellpigs



hardware is becoming cheaper and cheaper.

Think about it! If the base Amiga machine was say, AGA 2 Mb Chip, 060 acceleration, 16-Mb Ram, 1 Gb hard drive and CD-Rom, development for the machine would be a dream and you would see products emerging that were far superior to the equivalent PC specifications.

Unfortunately it's a chicken and egg scenario. Why should users upgrade when there is no software to make full use of, and why should developers develop for a high spec Amiga when this isn't the mass market of users? Things have got to change.

Most of Vulcan's forthcoming releases are urging, if not begging, users to upgrade. Take JetPilot for example. It works like a dream on an 060 with 6Mb Ram. It's an incredible flight experience, but we still made it work on a bog standard A500.

Now this is clever because the lower end spec users will be encouraged to upgrade to get the full benefits of the title but they have not been excluded altogether.

Another example is Tiny Troops. This works fine on a non AGA Amiga with 1 Mb chip but enormous enhancements are there if you have an AGA with 2 Mb chip.

HellPigs is due early next year. This is a full motion video adventure game with speech on two Amiga CDs, but we are still releasing a 22-disk floppy version without the full motion video and speech.

There are exceptions of course, and some of our titles will need AGA with 6 Mb and only playable from hard drive like Burnout but the overall message is the same, 'it's time to upgrade'.

*Why do you think the Amiga seems to attract a loyal fan base in a way that no other machines seem to?*

Aesthetics! As every Amiga user knows there are so many options and choices. The current Microsoft slogan makes me chuckle. I think it is 'Where do you want to go today?' Now that sums up the Amiga totally, whereas

the answer for the PC should be 'to hell and back'.

*Are there any exciting new projects in development that you can tell us about that haven't been included in the 'Future Release' page of your web site?*

Oh yes - where to start? One we are really excited about is Genetic Species - the closest and fastest Doom clone I have ever seen on the Amiga. Clone is really the wrong word as it surpasses any 3D engine available to date for the Amiga with full screen real time 3D in 1X! pixel perfect rendering at 25 fps.

I'm sure this will really blow the minds of any onlooker when released. At present there is intense designing for the enemies' logic and artificial intelligence and the only reason this title will ever fall behind from its release date is because we can't stop testing and playing it.

*Do you believe that, because the Amiga is a relatively easy and inexpensive format to write for compared to the PC, you are much more likely to discover genuine talented programmers and game concepts? Does the fact that writing for the Playstation (via the 'Yaroze') or PC is so prohibitively expensive that the games that will emerge will be less original and safer?*

Yes and no. Talented programmers and game concepts are apparent and rife on all formats. Just because other formats cost more for basic development specifications, doesn't mean they don't require talent or don't require imaginative concepts.

But it is true to say that for future development companies the Amiga is a very good platform to start from due to the costs involved and the ease of transferring imagination to code.

The main difference at present with developing for the Amiga and other platforms is that just as much pleasure is gained from coding as playing. After all, the Amiga is a hobbyist's machine and far more accessible

and is used as a creative tool rather than a business tool. There will always be incredible talent that stems from around the Amiga.

*How would you account for the great success of the Valhalla series? Radical though the inclusion of speech was, it couldn't have been just that which provided the attraction.*

Apart from the digital speech we believe that the Valhalla series is a huge success due to the crossword type of lateral logic that is required for the puzzles along with the humour of the characters that unfolds within the stories. So much so that even after the third instalment, another six titles are in the making to bring the whole adventure up to nine. Valhalla is and always will be an acquired taste - you either love or hate it. To date we have found no in between.



*How do you feel about the rather unkind words Amiga Power had for Valhalla? I do know of a few other software companies who haven't been entirely happy about their treatment by Amiga Power.*

Quite inspired at the originality and beliefs in one's own convictions, the best part regarding Amiga Power was that they awarded the Valhalla titles such ridiculously low review scores like 19% as opposed to 94% - there has never been this diversity in review scores and the fact that the score was so low made it more bearable and amusing.

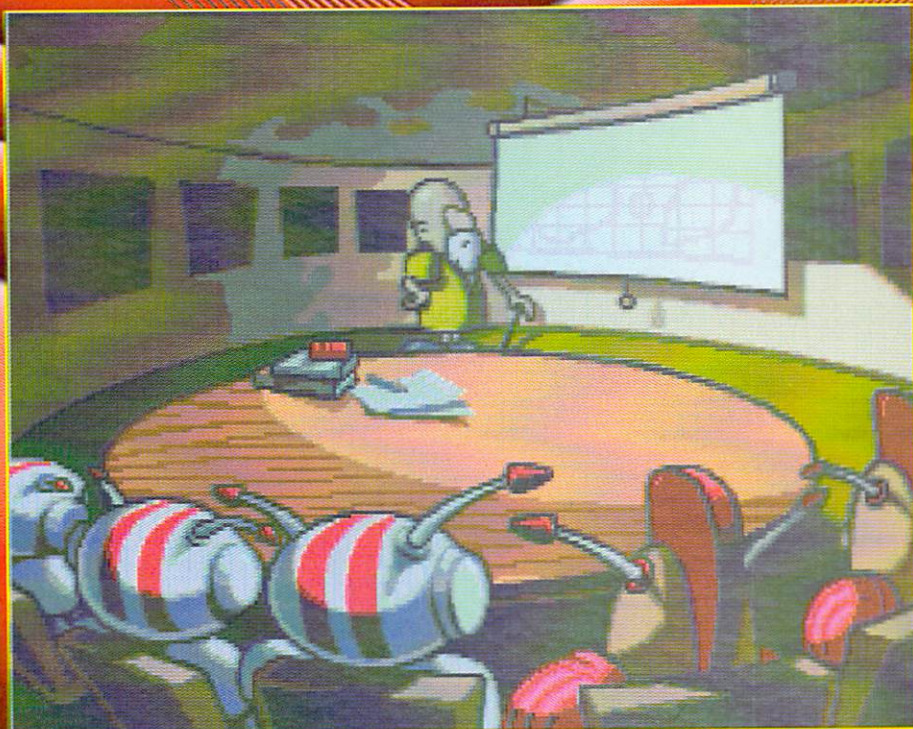
It also gave us a lot of publicity and eventually I believe made Amiga Power look rather silly and isolated. But all that aside, I'm sure they received as much pleasure and excitement at their audacity as we did when we realised that the Valhalla series sold more copies than their magazine and that the Valhalla series is still here today!

*Do you think you will be able to maintain the 'one release a month' target you have set for yourself without sacrificing quality?*

Yes indeed, maintained and already surpassed. As we are now the biggest Amiga publishers around, more and more excellent titles are winging their way to us for commercial release. This has allowed us to choose the highest quality products for inclusion in our MiniSeries range.

We originally forecast one Amiga title to be released every month but winter saw the release of BogRats, JetPilot, Tiny Troops and Burnout and with Breed2000, Hellpigs and Wasted Dreams slated for early next year, the future release catalogue just gets bigger and bigger.

*What are the qualities you look for when somebody brings a new game to you? Vulcan have, in the last few months released colourful puzzle games such as BogRats and just about the most detailed flightsim ever*



Tiny Troops

*brought out for the Amiga?*

'Just about the most detailed flight sim?' JetPilot is the most detailed flight sim ever produced for the Amiga! I don't mean to sound arrogant about this, it's just that I am so proud of Michael Baur's achievement with this title - over two years of development and perfect to the last detail.

Games we look for have to be extremely addictive and rewarding to play; that's our main objective. Basically, if we love playing it and feel fulfilled, surprised, excited and

enthralled, the game stands a good chance of becoming part of the MiniSeries range.

We then look at how well the title is polished graphically and how professional the presentation, although with this area we contribute heavily to shape the title into a top-quality commercial product.

At the end of the day, the only way Amiga users will buy products is if they like them, so it is essential to put everything you have into each and every title to ensure there is a market for the next.



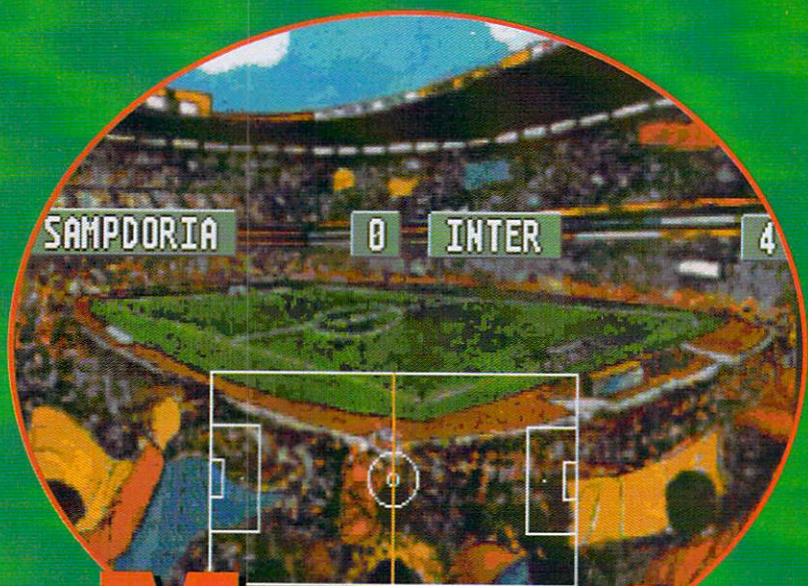
Tiny Troops

# ACTION PREVIEW

## SPORTS SIM

**Hugh Poynton tries  
his hand at  
managing  
Sampdoria**

# Euro League Manager



**M**anyk Software are a courageous bunch. It must be to release its new footy management game, Euro League Manager, just as the formidable Championship Manager 2 is set for release.

Euro League Manager differs from other football management games in that, from the start, you are given the choice of four European leagues to choose from. Become Huanelli Poyntochini and manage Sampdoria in the Italian league, steer Auxerre to victory as Hugh de la Poynton or assume a dour grumpy attitude, chew gum constantly and manage Manchester United. You can also manage your team in a European fantasy league.

The beauty of this feature is that each league you manage a team which is almost like a different game. Your opponents are different and the strategies and tactics you might have relied on before will no longer be as successful.

Manyk has thrown in some great innovations which add to the strength of the game. A talent scout is available, so that if you're on the look out for a fantastic new player, talent scouts can be dispatched to far flung parts of the globe. Transfer deals are made more interesting in Euro Manager – Manyk have included an option where players can be transferred using part exchange deals so your wheeling and dealing can be made more efficient and hard nosed.

In many ways this is a business game as well as being a football game. Your financial wizardry counts for as much as your football management skills. Invest the club's financial resources wisely and a new stadium could be built allowing more people in to watch the matches. Plough the proceeds from this into discovering successful players and your team will be winging its way to success and your stadium will start to resemble Wembley.

Unfortunately, Manyk have had a tough time trying to get permission to use the names of players and cup competitions for the game (I always these names were public domain, but unfortunately this isn't the case). Hopefully though, they will have got over this by the time the full version is available. However, Manyk have promised that if they can't use the players and cup names, they will include an editor in the finished game so real player names can be entered.

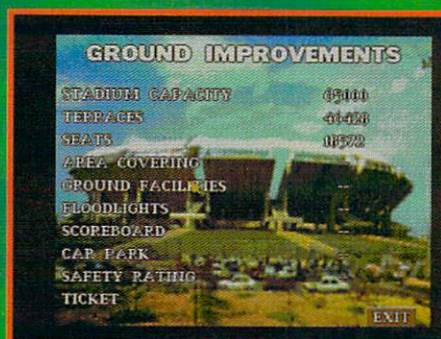
Euro League Manager looks to be shaping up to be a pretty good game and a useful addition to any management buffs footy collection – especially as you are not limited to managing English Premier League clubs. From what I've seen, Euro League looks like a fresh and original take on a well used idea. At the time of writing, the game was scheduled for release towards the end of November, we'll give you further details as we get them.



The Hugh Poynton all-star 11



It's like watching The Premiership down the pub this. Nearly.



Lovely stadium, looks like the burger joint from the Flintstones.

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# University

We all know how films are produced and books are written, the myriad of processes and stages that need to be undertaken to arrive at the finished product. How many people know how games are written? Because such enterprises lack the glamour of a novel or a film, the workings of developer are to most of us like the inner workings of a car - too complicated and mysterious to consider. However, there are big bucks in the software industry. Programmers such as Andy Davidson earn thousands of pounds for spin-offs of pet projects they undertook in their spare time.

Christopher Page is currently in his second year at Manchester University. Although using PCs and Macs for his Computer Science course, the Amiga is his machine of choice. He is currently working on Explorer 2260, a space simulation/trading game in a similar vein to Elite but with far superior graphics, wider playing area and more ships. I asked him about the trials and tribulations of creating and marketing a game from scratch.

The specs for Explorer 2260 look very detailed and complicated. Is the amount of data required for a project such as this (with thousands of planets, hundreds of races and dozens of different ships) a great deal more than for, say a racing game or a beat 'em up?

Creating a game like Explorer 2260 is a very difficult thing to do: in a racing game all you really have to be concerned with is ensuring that the screen updates fast enough, the cars 'feel' right and the enemies react/act in a believable way. In a beat 'em up your job is made simpler by the fact that, while you're having to move what are often quite large blocks of GFX around, you don't need to have routines generating the background as the characters move around: backgrounds are usually just large pictures.

I do not say that these are trivial tasks but they are considerably simpler than some of the things which large scale simulation games must do.

In Explorer 2260 there are many things which I must ensure are updated constantly (planet/ship positions, rotations and velocities, the dynamic universe model and the

Interstellar Information Networks (IIN)) along with the necessity of fast screen updates, real-time calculation of masses of data and a myriad other tasks.

Such complexity requires large amounts of code which must be optimised to run at an acceptable speed. Take as an example the IIN (the piece I have done the most work on so far): The IIN is basically a futuristic web browser which provides the player with an interface to a massive amount of constantly changing data from around the game universe.

The actual code to interact with the IIN is really just an adaptation of standard web browser code. It's what goes on underneath that is so complex: each time the user logs onto the IIN and moves between pages and sites the game must generate the required site from

a stored set of possible pages and words plus some measure of response to the actions of the player (ie: if the player has hired someone to work as a prospector there should be messages from the prospector occasionally appearing in the player's mail to the effect that one area is rich or poor in resources and so on).

*It is also necessary to adapt the contents of the IIN according to the dynamic universe model and the player's position and social/legal standing. Add to this the required graphics manipulations and the code begins to get longer and longer!*

As to how much data is required: well, in racing games and beat 'em ups most of the data is in the form of graphics and sounds. Depending on the size and quality of the game the amount required can be fairly high. In a game like Explorer 2260 you have to store the graphics for the static screens as well as cockpit graphics, large amounts of sound data (I intend to have lots of sampled speech in there), as well as large and detailed maps of the galaxy and planets, 3D models for the ships, buildings, stations and weapons and masses of text for the user interface.



One of the Navigation computer screens in its most basic form. Chris tells us that the new version should look more like the IIN page. The large black area will be a stellar display allowing the player to select the required system and jumpgate destination

Why do you like writing for the Amiga? Do you find it much friendlier than other formats? Does the format enable more people access to games writing equipment at a lower price?

*I write for the Amiga for three reasons: firstly it is the most friendly environment I have worked on, and I have used Macs, PCs, Suns (Unix based systems). Secondly the Amiga hardware is the most elegant in the world. It may not have the raw power of a Pentium PC but, by virtue of the DMA custom chip design, many of the tasks*

which would be impossible on the PC can be done with a few commands on the Amiga.

Finally, the PC market is so full that it is risking collapse under the number of near identical releases. This makes it nearly impossible for a single coder to have his work noticed, appreciated and criticised. Is it

any wonder that Amiga coders are usually a lot more careful when releasing games to ensure that they are debugged and polished? They have a lot more feedback from the public, in one form or another, than lone PC coders who have to struggle to get their work noticed.

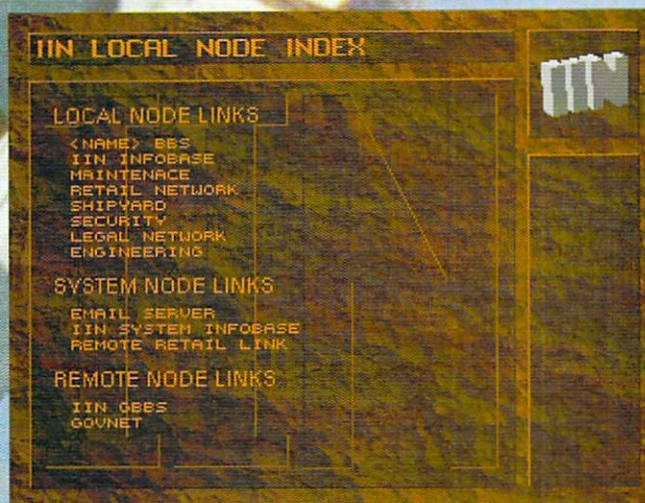
I am going to be very careful answering your question about the price: Yes, the Amiga does give a lower price entry point for coders BUT the price of a system suited for programming can be quite high: I am using an A1220 with a Viper030 40MHz board, 33MHz 68882, 8 Mb fast ram (maybe 16 in the near future), 360Mb HD and a PC, ATAPI compatible, quad speed CD Drive connected through the internal IDE interface. All this makes for quite a price....

● Next month Chris will explain the 10-step process involved in designing and creating a computer game

# challenge

**Hugh Poynton talks to young hopeful Chris Page about the pleasures and pitfalls of developing a game**

Screen shots are limited at the moment because the game is in an early stage of development. This is the INN, Explorer's interstellar version of the WWW - a useful device for finding out important information



# Guildhall Go

Software publisher Guildhall has announced it is to supplement its range of games with four old faithfuls from Microprose; *Special Forces*, *Mission Impossible*, *UFO* and *Colonization*. Six more titles will follow shortly including *Fields of Glory*, *F19*, *F117A*, *Starlord*, *Dogfight* and *B17*. Here's a quick look at the first four games in the budget range.

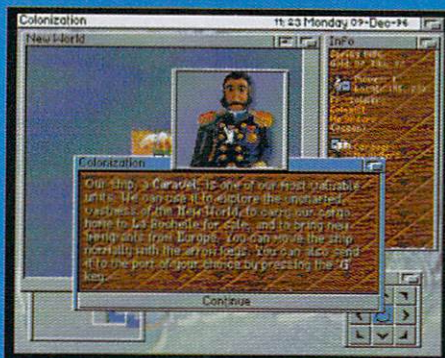
## Colonization

Games genius Sid Meier's follow up to *Civilization* focuses on the exploration and development of the New World. Covering the period of colonial development from the 1500s to the mid 19th Century, it challenges the player to become the most dominant force in the newly discovered territories.

You have the choice of playing one of four colonial nationalities, French, British, Dutch or Spanish. Each has its own particular advantages which fairly accurately reflect the

way in which these nationalities operated in the New World. For instance, when it comes to trade, the French have an advantage because they traditionally enjoyed more cordial relations with the native people.

Throughout the course of the game you have to decide whether to follow history and do the traditional Western European thing of killing all indigenous populations and destroying their culture, or exist in peace with the native inhabitants. Basically a fascinating game with a bit of a social conscience.



## THE LOW-DOWN

|                       |                   |
|-----------------------|-------------------|
| <b>PUBLISHER</b>      | Guildhall Leisure |
| <b>DEVELOPER</b>      | Sid Meier         |
| <b>HD INSTALLABLE</b> | Yes               |
| <b>PRICE</b>          | £14.99            |
| <b>SUPPORTS</b>       | Any 1Mb Amiga     |

|                    |        |
|--------------------|--------|
| <b>GRAPHICS</b>    | 75%    |
| <b>SOUND</b>       | 75%    |
| <b>PLAYABILITY</b> | 88%    |
| <b>DIFFICULTY</b>  | Tricky |

## OVERALL SCORE

82%

## THE LOW-DOWN

|                       |                   |
|-----------------------|-------------------|
| <b>PUBLISHER</b>      | Guildhall Leisure |
| <b>DEVELOPER</b>      | Microprose        |
| <b>HD INSTALLABLE</b> | Yes               |
| <b>PRICE</b>          | £9.99             |
| <b>SUPPORTS</b>       | A1200 & A4000     |

|                    |        |
|--------------------|--------|
| <b>GRAPHICS</b>    | 82%    |
| <b>SOUND</b>       | 80%    |
| <b>PLAYABILITY</b> | 76%    |
| <b>DIFFICULTY</b>  | Medium |

## OVERALL SCORE

79%

## Impossible Mission 2025

A mixture of arcade and puzzle action in which you choose to play as Ram the Robot (no kidding), Tasha the Russian Gymnast or Felix Fly (who sounds rather like a character in an Isaac Hayes movie). The aim of the game is simple enough: run about a huge factory stuffed with the evil Doctor Atombender's robots collecting powerups and destroying as many droids as possible. To make things even trickier you've got to accomplish your mission in a

set time or in true Bondesque fashion, the evil doctor will launch a huge missile which will destroy the world.

Impossible Mission 2025, although requiring considerably less brain power than *UFO* or *Colonization*, is nevertheless still a pretty enjoyable and diverting beat 'em up. A good game to play if you only want to spend a few minutes mucking about on the computer rather than immersing yourself in three hours of complex strategy.



# odies

## We take a look at the first four Guildhall/Microprose re-releases

### THE LOW-DOWN

**PUBLISHER** Guildhall Leisure  
**DEVELOPER** Microprose  
**HD INSTALLABLE** Yes  
**PRICE** £14.99  
**SUPPORTS** All Amigas

|                    |        |
|--------------------|--------|
| <b>GRAPHICS</b>    | 78%    |
| <b>SOUND</b>       | 77%    |
| <b>PLAYABILITY</b> | 86%    |
| <b>DIFFICULTY</b>  | Tricky |

### OVERALL SCORE

82%

### UFO

Have you ever seen the excellent 70s Gerry Anderson UFO telly series? The programme was hilarious. The commander of earth's defences looked like an extra skinny and wet Andy Warhol. The primary line of defence against flying saucers was a submarine manned by blokes dressed like the Village People and every woman on the Moon Base had purple widows peaks. And everybody smoked. All the time. Even when engaged in a life or death space battle with a flying saucer you could guarantee that the pilot of the interceptor would be chugging away like a steam train.

Microprose's UFO shares its name and story line with the telly programme. Your job is to protect the earth from the

mysterious aliens. After being given an initial budget of a few million dollars, a troop ship, a couple of interceptors and a free base, you have to set about your task of freeing the earth from the threat of alien invasion.

However, it's not just a matter of blasting aliens. Like everything these days your force must also function efficiently as a business. Twenty countries are funding the alien busters (X-Com) and success is critical in deciding what future funding you receive. If you mess things up enough governments will lose faith in you, save their pennies rather than donate funds and even sign pacts with the aliens. A fascinating and unusual strategy game.



### Special Forces

The last of the initial four budget titles that Guildhall is releasing is Special Forces, a strategy/shoot 'em up game in which you command a detachment of specialist troops. You can choose from a variety of missions ranging from rescuing prisoners of war and blowing up Scuds, to the rather morally dubious assassinations.

You choose everything from the location of the drop zone to the tactical formations of your troops and the weapons and explosives that each carries. All team members start off under computer control but each one can be brought under direct

control by pressing the corresponding key. However, Special Forces is far from being a pure shoot 'em up and if you try and charge the enemy your soldiers will drop like flies.

The game is pretty challenging. I found that even on rookie skill level (where the enemy soldiers had the fighting ability of Mr Blobby) my elite troops didn't last long. One major let down is the fact that, unsurprisingly for a four year old game, the sound effects are fairly poor. The gunshots for instance sound like heavy calibre pea shooters. Despite this flaw Special Forces is fun, and cerebral enough to keep you occupied for a while.



### THE LOW-DOWN

**PUBLISHER** Microprose  
**DEVELOPER** Sleepless Knights  
**HD INSTALLABLE** Yes  
**PRICE** £9.99  
**SUPPORTS** All Amigas

|                    |        |
|--------------------|--------|
| <b>GRAPHICS</b>    | 70%    |
| <b>SOUND</b>       | 60%    |
| <b>PLAYABILITY</b> | 75%    |
| <b>DIFFICULTY</b>  | Medium |

### OVERALL SCORE

70%

All in all the re-released Microprose titles are well worth getting hold of for the money. Colonization, although bearing a bit of a resemblance to Civilization offers a very engaging game based around one of the most interesting periods in human history, the discovery and exploitation of the New World. UFO is a complex and engagingly original strategy game that will definitely provide value for money. These two games are available for £14.99 and I would recommend them to anybody. Special Forces and Impossible Mission 2025 are a bit ropier and not quite up to the standard of Colonization or Mission Impossible. However this is reflected in the price, and at £9.99 both are pretty good games for the money.



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some common  
command line  
parameters



# Shell shocked relapse

**L**ast month I ran through a very quick introduction to using the Amiga Shell and CLI. I mentioned that even though most programs now-a-days are run through Workbench, you can still only access certain functions by using the Shell at other times, it is just more convenient to use the Shell.

Take MultiView, if you pop open a shell and type

```
MultiView ?
```

This will return a list of all the extra parameters that MultiView understands – this type of list is called a template. These parameters are usually one of three possible types and are denoted by having a tag at the end of each parameter name, these being:

```
/S - Switch, turns on a function
/N - Requires a numerical input
/K - Requires a string input
```

Normally when you ask MultiView to display a file it will do so on the Workbench screen. This is fine for text files but not so good for pictures. By adding the SCREEN para-

meter, which is a switch as you can tell by the /S shown on the command template, when you specify a file name this tells MultiView to use its own screen instead of a window.

As I mentioned last month, unless you have the original program documentation there is no real way of finding out exactly what each parameter does. If you come across a command you have never seen before, working out what each parameter does and what input it needs is half experience and half guess work.

Generally many commands take similar parameters, two that you will see a lot are PUBSCREEN and SCREENMODE and normally both expect a name to be given. These are both to do with how the command takes advantage of the Amiga's screens.

Since Workbench 2 the Amiga has had what are known as public screens on which any programs can run or visit, the Workbench is a public screen called Workbench. The PUBSCREEN parameter allows you to specify the name of a public screen and so force a program to run off that screen. You would normally specify the screen name like this

```
MultiView s:startup-sequence PUBSCREEN="screen
name here"
```

It is important to use quotes, otherwise if a screen name has spaces, only the part of the name up to the space would be used.

The other SCREENMODE parameter is used if a command runs on its own screen anyway. This allows you to force the program to use a specific type of screen – FastView and ViewTek are two examples. You have to provide a specific Amiga screen mode name to get this parameter to work correctly (see box out for screen name information).

FastView is very flexible when it comes to specifying a screen mode as it accepts wild cards in the name. For example, if you have an SVGA monitor that has to have a 30Khz display you can use:

```
FastView picture-name SCREENMODE="MULTISCAN:#?"
```

to force FastView to use Multiscan screen modes which are compatible with the SVGA monitor. Again with this parameter you need to put the screen mode in quotes or the program will just ignore everything after the first space and you will not have the screen mode you wanted. In general if a parameter be it a screen mode or file name you should always enclose it in quotes, even if you are not sure.

## SCREEN MADNESS

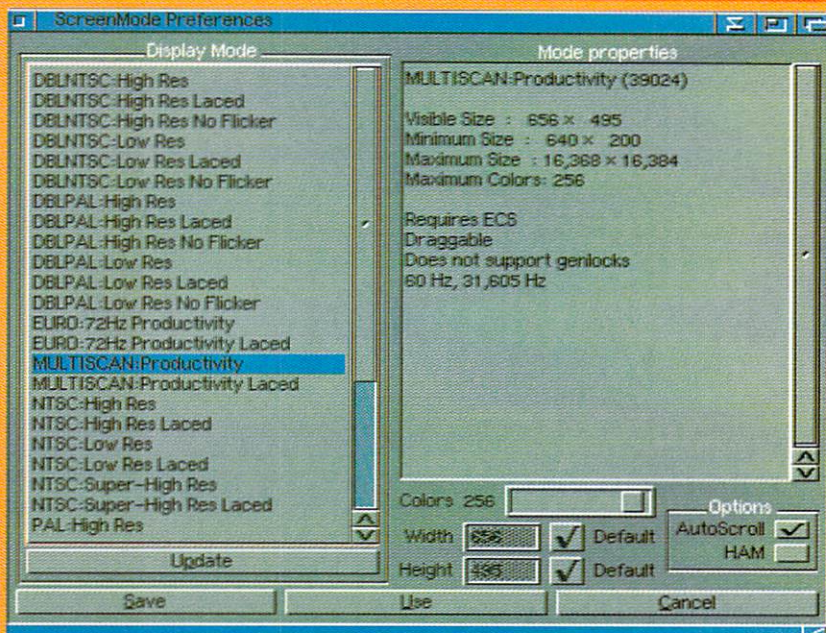
When referring to screens, the Amiga has a number of screen modes each of which have a number of screen resolutions. As standard all Amigas have and are capable of, PAL and NTSC screen modes. The PAL screen mode has a number of different screen resolutions these being 320x256, 640x256 and 1280x256 – all of which can be interlaced to double the vertical resolution to 512 pixels. These are referred to as Low Res, High Res and Super-High Res.

When referring to a specific screen mode, you have to first state the screen mode, put a colon and then put the screen resolution and whether that should be laced or not. To have a PAL 640x512 screen this would be

```
PAL:High Res Laced
Mode Name:Resolution Name
```

With AGA machines you have a much wider selection of possible screen modes and screen resolutions. Screen names are still written in the same way as for standard PAL and NTSC modes and usually use the same resolution names.

Certain special modes however such as No Flicker and Productivity have been added to pick out these higher 1x1 ratio screen modes and some of the more obscure modes require the actual pixel resolution to be entered such as SUPER72:400 x 150. If you ever want to find out a screen name just use the screen mode preferences to see which are available on your machine.



Look at all those lovely screen modes – most are totally useless except for all the 1x1 ratio ones

Paul Overaa  
rounds off the  
gadtool menu  
discussions



# Gadtools Menu Coding

**H**aving explained last month about the various steps needed to install a gadtool defined menu – locking the screen, getting the VisualInfo data, opening the window, creating/laying-out and finally installing the menu – it's time to look at the steps in a little more detail. One unfortunate thing about what would otherwise be a fairly bearable scenario, of course, is that we've got a whole load of library routines to perform, any or all of which could conceivably fail.

Regular readers will know that I have a standard way of handling this problem. Each task to be performed is written as a subroutine pair that contain the initial setting-up/allocation code, and the corresponding closedown/deallocation code. Whenever a routine is successful the deallocation routine address gets pushed onto a deallocation stack.

Listing 1 contains one set of routines – you'll find all the others in the coverdisk source file. The closedown routine, incidentally (Listing 2), handles all error/non-error closedown operations automatically so, other than making sure that all allocation/deallocation operations are coded using the conventions already outlined, we hardly need to think about error handling at all.

One of the other benefits of these arrangements is that getting the various pieces of code executed in the right order is extremely easy – all that's needed is a series of jsr and beq branch instructions similar to those shown in Listing 3.

There's little point installing a menu unless you're able to tell when it is being used. Gadtool menu messages are supplied as conventional IntuiMessages and so programs need to ask for messages of class IDCMP\_MENUPICK on any windows that have menus attached.

The example code you'll find on the coverdisk also requires IDCMP\_CLOSEWINDOW and IDCMP\_REFRESHWINDOW so the WA\_IDCMP window tag, which tells Intuition about the message classes we wish to receive, is therefore set up like this:

```
dc.l    WA_IDCMP, IDCMP_MENUPICK |
        IDCMP_CLOSEWINDOW | IDCMP_REFRESHWIN-
        DOW
```

Listing 4 is the menu-related fragment of the event handling code that shows how the identi-



It may only be menus, file requesters and simple print routines at the moment – but this month's skeleton code is going to develop into a novel utility

```
CreateMenu lea    menu,a0
            movea.w #TAG_END,a1          no tags
            CALLSYS CreateMenusA,_GadToolsBase
            move.l  d0,menu_p          save returned pointer
            beq.s   .error             #FreeMenu,-(a5)      push deallocation address
            move.l  #FreeMenu,-(a5)
.error     rts
FreeMenu   movea.l menu_p,a0          menu to free
            CALLSYS FreeMenus,_GadToolsBase
            rts
```

**Listing 1:** The paired allocation/deallocation routines used by the example code to create and free the gadtool menu.

cation magic is performed. As menu events – IntuiMessages of class IDCMP\_MENUPICK – arrive, they need to be checked to see to which menu option they correspond.

The 16-bit im\_Code field of these menu event IntuiMessages contain the menu number in bit 0-4, the item number in bits 5-10, and a sub item number (if used) in bits 11-15.

Since we only have one menu in use (and no sub items) all we need to do is copy im\_Code field, left shift by five places, and then logically AND the result with 3F hex in order to get a menu item number.

It's easy enough to do and the only thing you need to watch out for is filtering any extraneous menu events which arrive whenever a user starts to make a menu selection but then changes their mind and releases the right mouse button. In these cases menu events with a code MENU NULL are transmitted and obviously need to be recognised and ignored.

## THE COVER DISK CODE

The source you'll find on the coverdisk, or on our web site menu.s, and the runnable equivalent which I've cunningly called 'menu', certainly provide a working gadtool menu example. But it's a little more than this... I've taken the trouble to include some asl file requester code and, so that the program at least does something visible at the moment, a couple of temporary text printing and clearing routines which display any directory selections that are made.

Why the interest in directories? Well the example code is actually a skeleton framework that will be turned into a useful utility over the next couple of issues.

I'm going to build a utility that allows you to specify a directory and then read the date stamps

```
MenuMessage cmpi.l #IDCMP_MENUPICK,d3  check message class
            bne.s   NotMenuMessage      some other message types
            cmpi.w   #MENU NULL,d4
            beq.s   GetMessage          ignore if MENU NULL
            lsr.w    #5,d4               extract menu item number
            andi.b   #3F,d4
            cmpi.b   #SPECIFY,d4
            beq.s   SpecifyFile
```

**Listing 4:** Part of the event handler code which identifies menu item events.

```
closedown move.l  (a5)+,d0          retrieve
function pointer
            beq.s   Lib_normal_exit
            move.l  d0,a0
            jsr     (a0)            and execute
routine if it exists!
            bra.s   closedown
```

**Listing 2:** The menu removal operations occur automatically as this closedown loop is executed.

```
jsr     LockScreen
beq.s   closedown
jsr     GetVisInfo
beq.s   closedown
jsr     OpenWindow
beq.s   closedown
jsr     CreateMenu
beq.s   closedown
jsr     LayoutMenu
beq.s   closedown
jsr     InstallMenu
beq.s   closedown
```

**Listing 3:** This type of jsr-based control code is all that's needed to get the various menu installation routines executed in the correct order!



This type of directory-only style asl requester is obtained by using the ASLFR\_DrawersOnly tag

of every file present, converting and exporting them in ASCII form. One obvious use of a utility like this is to run it over directories which contain Web page files and then use the date information produced to incorporate 'last updated' date stamps in the Web site pages!

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[TELNET CLIENT - AMFTP AUTHOR!]
- .... **AmTalk**  
[INTERNET CHAT CLIENT]
- .... **mFinger**  
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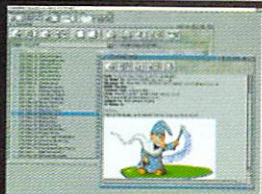
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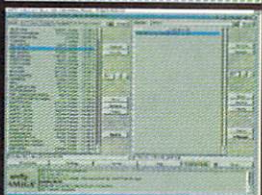
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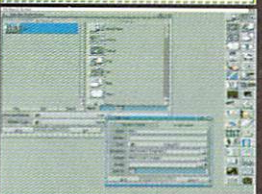
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# Tree Time

**T**his month I got a letter from a J Chantler who, unlike so many people involved in AMOS, is actually over 35. In fact he's way over 35 – he's 70. I know, it took me by surprise as well. Well J, you sent me a few old AMOS routines which you had in your archive and it was a real blast to see some of them again. One in particular I remembered from a long way back and decided to give a revamp.

It's a program that makes fractal trees, I'll mention a few refinements you can make in a minute, but basically here is the program:

```
Screen Open 1,640,512,16,Hires
Hide : Curs Off : Cls 0
```

A fairly common start, I think you'll find. Hide everything and make the scene black:

```
_START:
```

This is a label which gives the program a point to go back to when each tree is finished. At the end of each render, the machine waits for you to press a key and the process starts again with the next tree being written over the last. (I don't know why I did that, but just liked the look of it.)

```
PICKINK
```

This PICKINK procedure is the one which chooses the colour of the tree and we'll come to that at the end:

```
L=2 : Degree
FRACTREE[320,255,25,0]
Wait Key : Goto _START
```

And this monumental three lines is the main program. Impressive huh? Okay, not really,



but the results are good.

```
Procedure FRACTREE(XB,YB,D,T]
Shared Z
X=D*Sin(T)+XB
Y=YB-D*Cos(T)
Draw XB,YB To X,Y
If D>2
  FRACTREE(X,Y,D-Rnd(5),T-Rnd(45)]
  FRACTREE(X,Y,D-Rnd(5),T+Rnd(45)]
End If
End Proc
```

This is the main proc. and begins by making the variable Z a shared one, allowing us to use the products in the main program. The first bit of maths calculates the position of the first strokes, the program feeds back on itself calling the procedure from within and we're off. The tree is built.

```
Procedure PICKINK
I=Rnd(15)
If I=3 or I=0 Then PICKINK
Ink I
End Proc
```

This last proc picks the colours from the 15 available. It carefully chooses not to select the flashing colour 3 or 0 which is black, so you always get a non-flashing and non-black colour for the tree. (If it was black it wouldn't show up and if it flashed it would drive you batty!)

Added refinements to the program could include: A method of saving the pictures and a method of choosing to overwrite or start again. Overwriting is easy, just put in a query "do you want to continue, restart or quit (C,R or Q)?" and then use a test to see what was pressed. To avoid spoiling the picture you could put your message on another screen which is only about 25 pixels high but the full width of the screen.

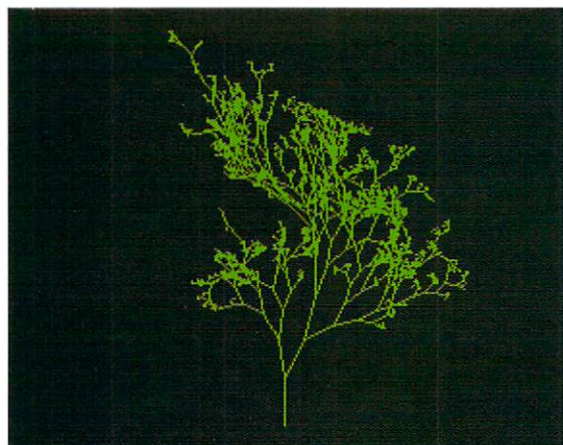
Saving is easy: Use the SAVE IFF command and use the Fsel\$ file selector. Something like this:

```
FS=Fsel$("dh0:amos
graphics/iff/*.iff",,"Save the File",)
Save Iff FS
```

Insert this before the WAIT KEY command and you will save the picture each time a tree is drawn. This is still a very simple program and you could, if you have any knowledge of fractal maths, put in a pop-up menu with some method of altering the maths to get a different result.

## WRITE STUFF

If you have any other AMOS programs or queries about AMOS, please write to the usual address: Phil South, Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield, SK10 4NP. Please send routines on an Amiga disk with notes on how the program works on paper, not as text files on the disk. Make the routines short enough to appear in print, i.e. no more than about 30-40 lines of code and if possible make them use no external graphics, or if they can't be used without them then be sure to provide them on the disk in native IFF format, the same goes for sound files. Follow these guidelines and you stand more chance of getting your routines into print.



Part three of the Photogenics' tutorial looks at composition



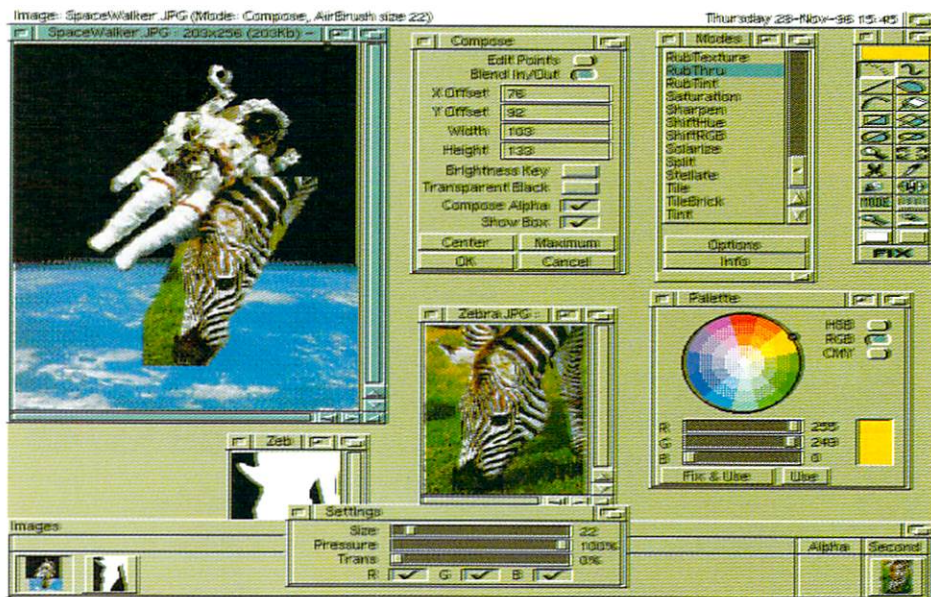
# It's composition time!

**T**he fairly straight forward alpha channel tutorial last month leads nicely onto Photogenics' composition function. It may not look much, just a single menu item, but provides a powerful tool when it comes to combining images.

To begin with, you are going to have to load in a few images to let you fully play around with the compose tool. So load the normal spaceman and zebra tutorial images – you will also need the zebra alpha clip image.

The compose tool works by combining two images, one on top of the other. The background image is the primary image and the one you want to overlay has to be made the secondary image. You can do this by dragging the image icon to the secondary slot, or remember the keyboard short cuts, 1 to make primary, 2 for secondary and 3 makes an image the alpha channel.

Once you have them all loaded, make the zebra image the secondary one. If you now click back on the spaceman image you will be able to select the compose item from the image menu. A big old zebra head will appear over your spaceman picture and a new requester. You can now move and resize the zebra image to whatever size and posi-



Using the blend tool you can 'paint' the zebra image onto the spaceman image and you can of course move and resize it as well

tion you like using the guide boxes that outline the zebra image.

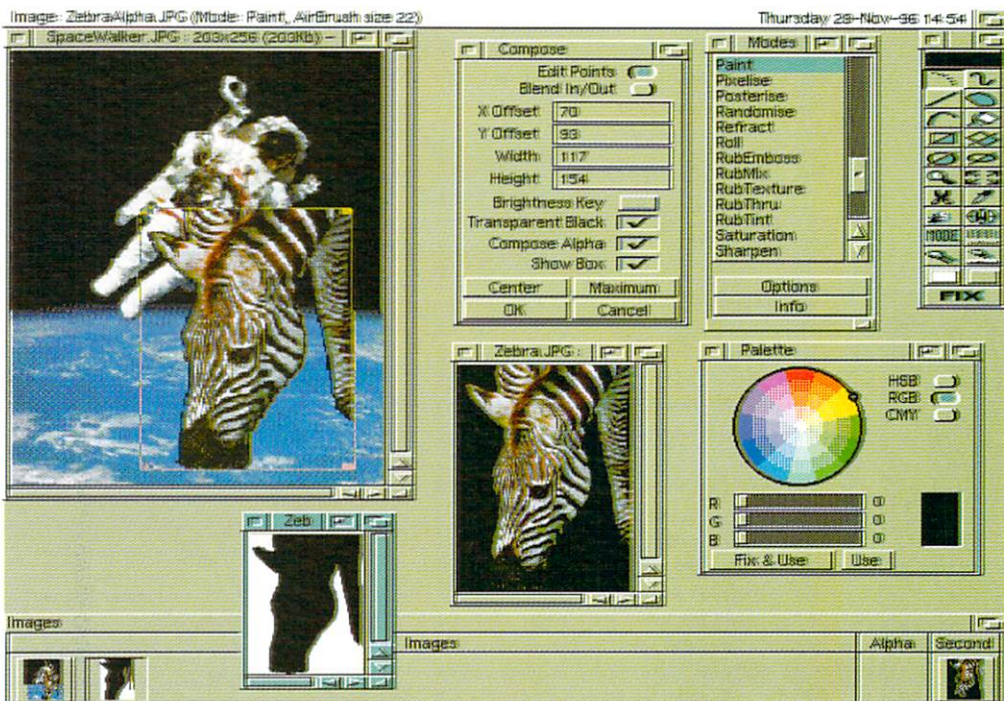
Plonking one image onto another is not normally what you will want and a little more

subtly is required. If you now make the zebra clip image the actual alpha channel, you will see the alpha can happily be used as normal and cuts out the zebra's head. The alpha channel action can be de-activated at any time by de-selecting the alpha switch in the composite requester. You will also be pleased to see the alpha is scaled right along with the normal zebra image, so you don't have to worry about doing this yourself.

Using the alpha method may be fine if you have an alpha channel already drawn up, but otherwise it is not the most convenient way to use the compose function. De-activate the alpha channel in the compose requester and select the blend radio gadget. You can now draw directly onto the primary image as you would another image, but this time you are painting whatever the secondary image is onto the main image.

The final thing is an alternative to using alpha channels to block out parts of the image. If before hand, you paint black onto the parts of the secondary image you don't want to see and then set up a compose, these black areas will be made invisible when you select the transparent black tick box.

One last thing you should remember when you have blend selected, is you are still using the normal Photogenics paint tools. It is the rubthru tool that you see selected and at any time you can select another paint tool and use that effect on the main image.



Photogenics using the black transparency mode to leave parts of the zebra unseen on the main spaceman image

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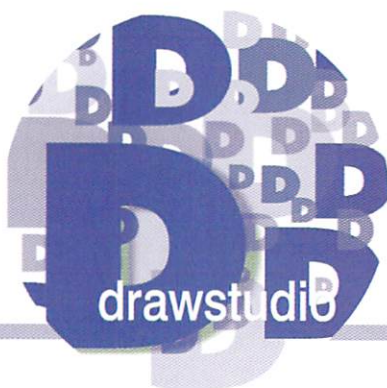
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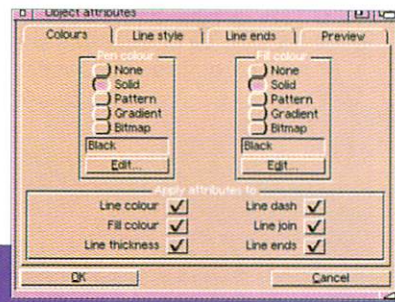
Larry Hickmott  
explains how to  
make the most  
out of  
DrawStudio



# Easy on the Draw

In the following tutorial, I want to show you some things you can try with your DrawStudio coverdisk. Things which I'm sure will bring a smile to everybody's face when they see how flexible the program is for creating graphics for video titling, web imagery, DTP and so on.

Text can be created easily by stamping the text tool on the page and just start typing



## TEXT FOR TITLES

Your first step is to select the Text tool. Now stamp it down anywhere on the page. Type the words *Amiga Computing*. With the object selected, choose the menu item, *View/View to Selected Objects*. You can also use the *Magnify* tool to zoom in.

So far we have an ordinary piece of text. Now let's really jazz it up. Making sure the text is still selected, choose *Object/Convert to Bezier*. Now choose from the *Object* menu, the item called *Attributes*. A panel appears so you can choose the attributes for your text. Click on the *Line Style* tab and choose a 1 point line weight (it should already be this). Now click on the *Colours* tab and click on the *Gradient* button in the *Pen Colour* column. Click on the *Edit* button in the same column.

The Gradient list appears. Choose the gradient

called *CD*. Click OK and then click on the *Bitmap* button in the *Fill Colour* column. The *bitmap* list appears but because we have no bitmaps loaded yet, click on *New* and then on *Edit*. We need to load a *bitmap* into DrawStudio, so click on *New* in the *Project Bitmaps* area of the requester.

A requester will appear for you to choose a *bitmap*. You'll find a useful one in the *Image drawer* (inside DrawStudio's drawer) called *Raindrops.iff*. Click OK to select it and it will be loaded into DrawStudio and once present, will appear in the *Preview* window. Call your *bitmap* fill *AC TITLE*. Change the *Fill Type* to *Tile* and change the dpi to 150 in the *X DPI* and *Y DPI* text gadgets.

Click OK, and OK again and then click on the *Preview* tab. After a short while, DrawStudio will show the text and the line fill. Now for the big test,

The *Object Attributes* panel enables you to apply line weight and styles to objects as well as different types of fills. There is even a preview so you know how it's going to look

click OK and the attributes will be applied to your text. As you can see, the text is a little small, and so the *bitmap* fill isn't that prominent. To correct this, zoom out by choosing *View/View Full Width*.

With the *Pointer* tool selected, grab one of the corner handles and stretch the text. After a short while, the text will redraw and you will see the fill more easily.

Now that you have created the text, what now? How about converting it to a *bitmap* so it can be used in a DTP/word processing package, a Web page or even a video titling program?

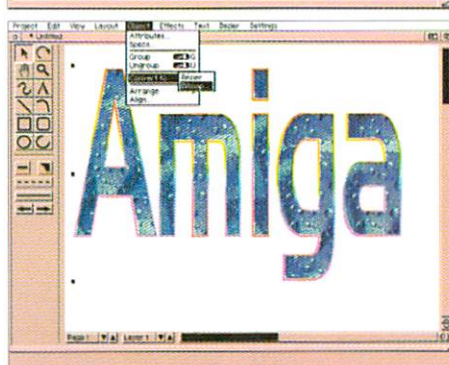
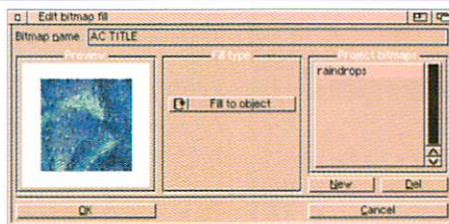
## CONVERTING TO SUPER SMOOTH BITMAPS

To convert the text to a *bitmap*, make sure the text is still selected and choose *Convert to Bitmap* from the *Object* menu. When the *Convert to Bitmap* panel appears, leave it set to 24-bit for the best quality, change the DPI to 150 (x & y) and press return. Also make sure *Anti-aliasing* is selected and *Clone* is not active. This process will create a rather large *bitmap* title suitable for DTP but probably too big for Web graphics and Video work.

To create a smaller title you can leave the DPI set to 72 dpi or less. Just make sure you have *anti-aliasing* selected so the text will look super smooth around the edges.

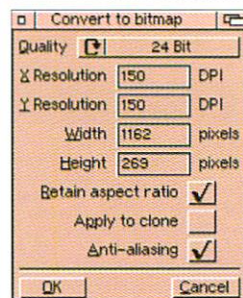
The last thing you would do and this can only be done in the full version (sorry folks), is to export this *bitmap* from the *Bitmaps* requester, (*View* menu) so it can be used in other applications. DrawStudio supports TIFF, IFF-ILBM, BMP, JPEG, GIF (256 colours or less only) and PCX when exporting and importing. You can also export as EPS, although you don't need to do this to get super smooth output.

As you can see, with DrawStudio, you don't need to know how to draw but having a great imagination helps in creating eye-catching graphics! This tutorial has covered just the tip of the iceberg when it comes to the things DrawStudio can do for you.

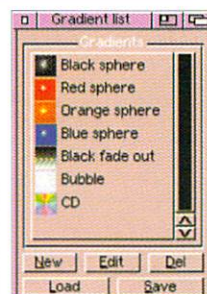


To convert an object to a *bitmap*, use the *Object/Convert to Bitmap* menu item

The *Edit Bitmap* requester can be used to load in new *bitmaps*, create new fills with the same or a different *bitmap*, or apply different *bitmap* fill types to various *bitmap* fills. It is possible for example, to have two different *bitmap* fills, with the same *bitmap* image with one filling an object, while the other is tiled within an object



The *Convert to Bitmap* panel is easy to use and thanks to its *anti-aliasing* button, smooth titles can be created in no time



Lists of gradient types can be created and saved to disk to use with specific jobs or saved as the default so they are always present

Paul Overaa,  
discovers a  
surprise Amiga  
music software  
gift



# Musical Connections

**A**lthough it may seem at times that the whole world has gone Web crazy there's no doubt that it's not without good reason. Certainly, for musicians, there are some seriously good advantages to be had. Almost all the major Midi equipment manufacturers including Akai, Roland, Yamaha and so on now have, or are in the process of building, Web sites.

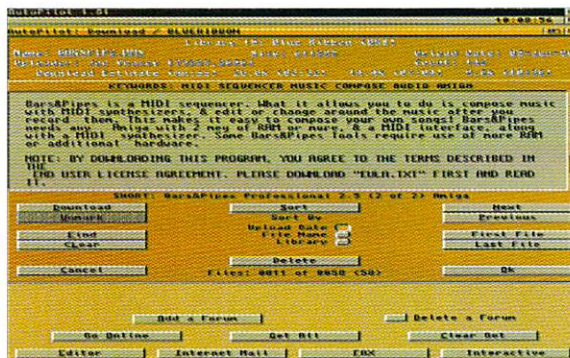
So too are a great many record companies, bands and musicians. In fact the only major company I have not heard express their intentions of getting into the Web scene are the synthesiser manufacturers Korg. I'm sure this situation will change soon enough although luckily there are a great many Korg-related private sites around so users of these synths have little trouble in finding Web material of interest.

One particularly good site for anyone interested in the technical side of music and Midi is the Music Search site which is basically an on-line reference source.

Among other things, you can download the Midi SDS (sample dump standard) from here and there are plenty of references to other educational/technical music sites. The document specifying the official Midi standard, which I've been asked about many times, can be ordered from the Midi Manufacturers Association site (see the addresses box out for locations).

Harmony Central is another good music site that has won a number of awards for its presentation and content. There are areas for guitar, bass equipment, effects, keyboards and synths, computers and music, and of course Midi. In this last section, plenty of useful introductory Midi articles can be found.

Although the majority of music sites offer little by way of Amiga-specific info, there are a few well known exceptions. RBF Software have a support site for OctaMED Pro and Sound Studio users. Another site which may be of interest is Dreamers Guild – the home page of David Joiner (who originally wrote the Music X program). As



*Musically minded Amiga users on CompuServe can really pick up a bargain at the moment by downloading some of the, now Microsoft owned, Blue Ribbon Midi/music packages*

you might expect this too, contains some Music X related material.

MidiCraft have also recently set up a Web site which not only contains info about their various projects but allows you to download various Music X and Midi files, and so on. Since the Craft brothers are very Music X oriented, chances are that this site may eventually end up providing some much needed, general support for Music X users.

And talking of Music X - I've been asked on a couple of occasions lately where Music X protocols, needed for sound bank dumping sysex communication, can be obtained.

There are various sources but MidiCraft have produced protocols for quite a few synths. Collections of these have appeared on Weird Science's Multi Media Tool Kit II CD-ROM, in various issues of the AM/FM disk magazine, and also on PD IV a CD-ROM available from Almathera (tel: 0181 687 0040).

If you haven't got a CD-ROM drive the best idea is to contact Seasoft Computing (tel: 01903 850378) because they have the equivalent collections of Music X protocols available on floppy disk.

Still on the sequencer theme Software Technology, who produce the long established

'Sequencer One Plus' Amiga Midi sequencer package, expect to have a product support site up and running within the next couple of months! Another recently found site which might be of interest was a hardware projects web page that, amongst things, includes details of how to build yourself an Amiga Midi interface.

## COMPUSERVE FREEBIES

If, like many people, you felt a little sad when Blue Ribbon Software sold out to Microsoft you might care to know that for some users there is, at least at the moment, an up-side to the scenario.

Microsoft, who now own the rights to the Bars&Pipes sequencer, its various add on kits, SuperJAM, PatchMeister (the universal Midi editor/librarian package) and various other Blue Ribbon bits and pieces, have done something rather interesting – they've allowed all this Amiga music software to be put into Compuserve's Blue Ribbon BRS forum library.

Now I don't know whether this collection is available elsewhere but certainly, if you're on Compuserve, you can now get this complete range of Amiga music software (which at one time would have cost you over a grand), absolutely free. Now is that good news or what?

## WEB SITE ADDRESSES

Here are just a few of the hundreds of musical Web sites that are now available:

|                                |   |
|--------------------------------|---|
| Akai                           | <a href="http://www.akai.com/akaipro/index.html">http://www.akai.com/akaipro/index.html</a>             |
| Dreamers Guild                 | <a href="http://www.dreamersguild.com">http://www.dreamersguild.com</a>                                 |
| G.N.'s Korg i-series page      | <a href="http://hgicm.tu-graz.ac.at/Cpub">http://hgicm.tu-graz.ac.at/Cpub</a>                           |
| Hardware Projects              | <a href="http://homepage.cisiron.nl/~nctnico/midi.htm">http://homepage.cisiron.nl/~nctnico/midi.htm</a> |
| Harmony Central                | <a href="http://harmony-central.mit.edu/">http://harmony-central.mit.edu/</a>                           |
| MidiCraft                      | <a href="http://www.midicraft.demon.co.uk">http://www.midicraft.demon.co.uk</a>                         |
| Midi Manufacturers Association | <a href="http://home.earthlink.net/~mma/">http://home.earthlink.net/~mma/</a>                           |
| Music Search                   | <a href="http://musicsearch.com/">http://musicsearch.com/</a>   |
| Peavey                         | <a href="http://www.peavey.com/">http://www.peavey.com/</a>   |
| RBF Software                   | <a href="http://www.octamed.co.uk">http://www.octamed.co.uk</a>   |
| Roland UK                      | <a href="http://www.roland.co.uk">http://www.roland.co.uk</a>   |
| Yamaha                         | <a href="http://www.yamaha.co.uk/">http://www.yamaha.co.uk/</a>   |



*Not Amiga specific but Harmony Central is a good example of a well planned music site*

Paul Overaa  
discusses ARexx  
routines that can be  
used for performing  
calendar calculations



# A Dead Easy Way to Get A Date!

If you wanted to know what day the 1st Jan 1997 is going to fall on you could look it up in a calendar. But to find out, for example, the date of every Monday in 1997 (or what the date would be exactly 200 days from now) would be more difficult. You could go through the calendar week by week (or count through 200 pages) but in doing this you would surely suspect that there is a better approach.

Indeed there is and it's based on a method, or rather a convention, that astronomers and scientists have been using now for a great many years. It involves things called Julian Day numbers (JDNs) which essentially label every day since Jan 1st 4713 BC with a number. By using this date as a base point it's possible both to calculate the Julian Day number for a given day AND calculate the date given a specific JDN.

Now for a number of reasons (partly connected with rounding errors which are produced in conventional computer arithmetic) it's not possible to produce a single pair of formulae that will work for all possible dates.

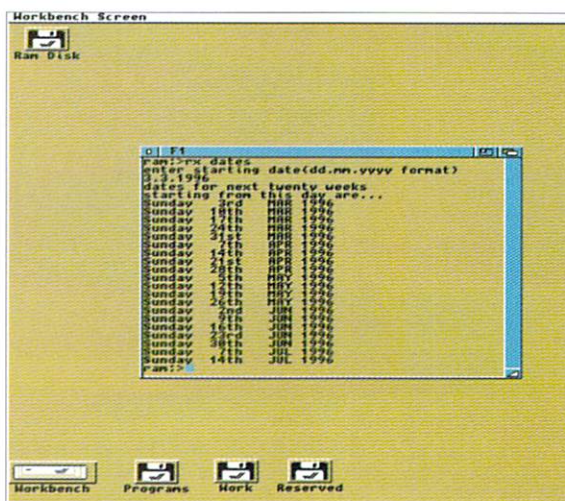
But if we restrict ourselves to a reasonable short time span, say +/- 100 years from now, it's possible to come up with a single pair of formulae which work perfectly well. Using ARexx this is exactly what I've done and you can see the results in Listings 1 and 2. The functions are called GetJdn() and GetDate() and the best thing of all about them - is that they are easy to use.

## SOME EXAMPLES

Supposing your birthday is 10th August and you want to know what day it will fall on in 1998. You could write a couple of script lines to input a date, use the ARexx parse instruction to split it up into separate day, month and year values, and then finally calculate the JDN and display the equivalent date. In short these five lines would do the job:

```
say 'give me your birthday in dd.mm.yyyy format'
pull birthday
parse var birthday d'.m'.y
jdn=GetJdn(d,m,y); say GetDate(jdn)
```

and the output would tell you that your birthday is going to fall on Monday 10th August 1998. Similarly, if you wanted to know what the date was going to be 200 days after the 24th June 1996 you could use these script lines...



The date routines in action with the example program!

```
jdn=GetJdn(24,6,1996)
jdn=jdn+200
say GetDate(jdn)
```

To find the date of every Wednesday in the year on the other hand you could enter a date for the first Wednesday and then use a loop like this to display all the rest by successively adding 7s to the JDN value:

```
i=0; jdn=GetJdn(d,m,y)
do i=0 to 51
    say GetDate(jdn+i*7)
end
```

You'll find an example on the cover disk that asks you for a date and then displays the dates of that day of the week for the next 20 weeks. It is however, just an example and the best idea is to try the functions in your own programs.

All you need to do is write your script (making sure you terminate the code with an EXIT statement) and then copy the code for my two functions onto the end of it. From that point on you'll be able to use the GetJdn() and GetDate() functions in anyway you like. The only thing you must be careful of is not to pass the routines an invalid date because they do not make any checks on the dates passed to them.

```
/* ----- */
GetJdn: Procedure
BIAS=.000000001
parse arg d,m,y
if m>2 then
    do
        ydash=y; mdash=m+1;
    end
else do
        ydash=y-1; mdash=m+13;
    end
jdn=((365.25*ydash+BIAS)*1,
+((30.6001*mdash+BIAS)*1,
+d+1720982
return(jdn)
/* ----- */
```

Listing 1: The function which computes the Julian Day number from a date

```
GetDate: Procedure
BIAS=.000000001
month_name.1='JAN'
month_name.2='FEB'
month_name.3='MAR'
month_name.4='APR'
month_name.5='MAY'
month_name.6='JUN'
month_name.7='JUL'
month_name.8='AUG'
month_name.9='SEP'
month_name.10='OCT'
month_name.11='NOV'
month_name.12='DEC'
day_name.0='Sunday'
day_name.1='Monday'
day_name.2='Tuesday'
day_name.3='Wednesday'
day_name.4='Thursday'
day_name.5='Friday'
day_name.6='Saturday'
day_name_suffix.1='st'
day_name_suffix.2='nd'
day_name_suffix.3='rd'
day_name_suffix.21='st'
day_name_suffix.22='nd'
day_name_suffix.23='rd'
day_name_suffix.31='st'
parse arg jdn
day#=jdn-1720982
ydash=((day#-122.1)/365.25)+BIAS)*1
mdash=((day#-((365.25*ydash+BIAS)*1,
/30.6001)+BIAS)*1
d=day#-(365.25*ydash+BIAS)*1,
-(((30.6001*mdash+BIAS)*1,
if mdash=14 | mdash=15 then m=mdash-13
if mdash<14 then m=mdash-1
if m>2 then y=ydash
if m=1 | m=2 then y=ydash+1
day_number=(7*((day#+5)/7,
+BIAS-(((day#+5)/7,
+BIAS)*1))*1
return(day_name.day_number,
Right(d)|day_name_suffix.d,5), Right(month_name.m,5) y)
```

Listing 2: This function produces a date from a Julian Day number

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Dave Cusick  
investigates the  
legal battle  
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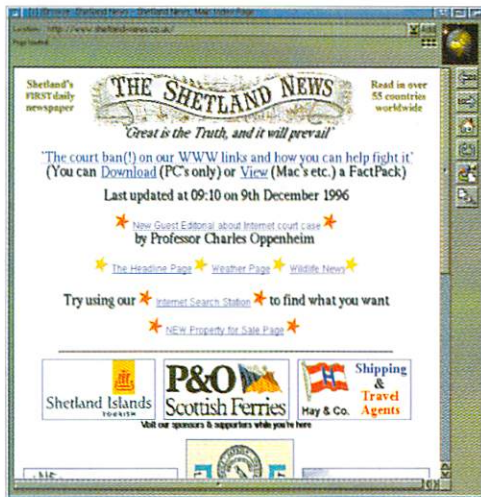
# Web War

**B**y now the majority of Internet users will probably have heard about the events in the Shetlands which are threatening to undermine the entire World Wide Web. The legal wranglings between the Shetland News and the Shetland Times could have severe repercussions.

For the benefit of those who have still to learn the details, the problems began when the Shetland News, an Internet-only publication, included links to the Shetland Times news pages using headlines from the latter for the hypertext links. Robert Wishart, the managing director of the Times, objected to the links and sued, saying they were in effect an infringement of copyright. On October 24, 1996, Wishart obtained an interim injunction at the Court of Session in Edinburgh, preventing the News from quoting Times headlines or linking to the Times site. The full court hearing may well be several months from now.

Of course, Jonathan Wills, news editor of the year-old Shetland News, has claimed that this use of links is perfectly legitimate. Interestingly, Wills used to be the editor of the Shetland Times, which is primarily a print-based publication, until he was sacked. He later proved unfair dismissal and won substantial damages. Wills is not Wishart's biggest fan, a fact which becomes immediately apparent when reading the former's profile of the latter on the Shetland News site.

Wills has argued that no attempt was ever made to claim the articles were not the work of Shetland Times staff, and that in fact the links increased the Times web site readership around threefold. He says that Wishart does not understand the nature of the Web, and that if litigation is successful the Web could be plunged into a state of chaos, becoming totally un navigable because directories would effectively be illegal. In an on-line statement on the Shetland News site Wills calls Wishart's action "an unprecedented attempt to block free access to the Internet." He now has the backing of the National Union of Journalists, as well



The excellent Internet-only Shetland News...



...and its print-based rival

as considerable support amongst legal commentators and the Internet community.

Wishart, on the other hand, maintained in a statement to BBC legal correspondent Joshua Rozenberg that the action is "solely to protect our company and its employees from a parasitic activity which, allowed to run unchecked, would make it impossible for publishers to reap the rewards of their efforts and destroy the principle of copyright on any material published on the Internet."

The "rewards of their efforts" Wishart refers to are discussed in Lord Hamilton's judgement granting the interim injunction. Essentially Wishart is claiming that the Shetland Times is losing potential advertising revenue which might be obtained by selling space on its front web page, because people are leaping straight to their news stories from the Shetland News site.

Clearly, Wishart's argument raises some valid points. Would accepting his point of view really render the whole Internet illegal, as Wills claims? Links to pages within other sites might be found to be unacceptable, but it

does not necessarily follow that links to front pages of other publications would be forbidden.

Similarly, with permission to link to a page (which would be implicitly granted in the reciprocal link arrangements often made by Web page authors) it would be perfectly permissible to do so. Yahoo would apparently be safe, given that it is an index of front pages which are usually only linked to when nominated by their creators. Unfortunately, crawlers like Alta Vista would indeed appear illegal. Anxious eyes all around the world will be focused on the proceedings when they finally get underway.

Incidentally, to cover my own back and avoid any possible legal ramifications, I'd just like to point out that the sources used for this article include the Shetland News site (<http://www.shetland-news.co.uk>), the Shetland Times site (<http://www.shetland-times.co.uk>) and the NUJ homepage (<http://gnw.gn.apc.org/media/nuj.html>), and the stuff I've quoted all comes from official press releases. Please don't sue me, Mr Wishart; I wasn't infringing copyright, I was merely doing my journalistic job.

## OTHER NEWS

*The forthcoming Shareware front end Konnection will apparently be based around a server that performs network tasks from ARexx commands sent to it. This means that a third-party GUI could be implemented and Konnection commands could be included in, for instance, AmIRC scripts. It all sounds intriguing - and you'll read the review here first, of course.*

*Demon Internet is now offering free Realaudio streaming for its customers' homepages as part of its tennor-a-month (plus VAT) service. Amiga-based software cannot handle Realaudio encoding or decoding, but using a PC or Macintosh emulator it's now possible to make your home page sonically as well as visually impressive.*

## CONTACT

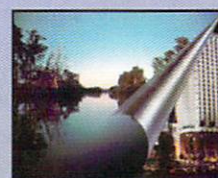
If you wish to contact me, my e-mail address is [dave@dcus.demon.co.uk](mailto:dave@dcus.demon.co.uk). Questions, suggestions and feedback are all more than welcome. I also have a homepage, which can be found at <http://www.dcus.demon.co.uk/>.

# Casablanca

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Casablanca is a device which allows anyone to edit video, simply, and in a non-linear fashion. It works by recording video scenes from a camcorder, on to a hard disk. The shots can then be re-arranged at will, and can have professional effects, and soundtracks added.

### So, How Does It Work?

Using Casablanca does not require any computer experience. The controls and displays are clear, simple to use, and easy to understand.

After the device is connected and switched on, a selection menu is immediately displayed, with all the necessary steps for nonlinear video and audio editing. The options are as follows :-

- **Settings:** For language & video quality level.
- **Record:** Copies video to the internal hard drive.
- **Trim:** To set your required in and out points.
- **Insert:** Move your trimmed scenes into the storyboard to create the playback order.
- **Transitions:** Select and define your effects. Effect previews are shown in real-time.
- **Image Processing:** Make your video negative, brighter, darker, or change colours.
- **Titling:** Here text can be added to your video. It can scroll in many ways for custom designs.

- **Audio dubbing:** Three stereo tracks for original sound, music, and commentary.
- **Finalise:** Copies your completed work to tape, either digital (via optional FireWire) or analog (VHS, S-VHS, Hi8 or via component RGB).

The included trackball which is used to control Casablanca can be replaced with a PC type mouse, and if video titling is a frequently used option, a PC type keyboard can be used.

The hard drive inside the Casablanca is removable and only the video and audio data are stored on the drive. If longer video segments need to be recorded, an external system can be added, containing up to three additional drives.

The system instructions and software are stored entirely on floppy disk, allowing you to update software features and add optional effects without opening the case.

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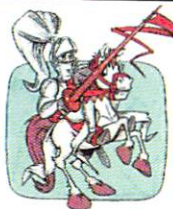
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